SIU HealthCare

Exceptional Medicine. Partners in Care.

TeleHealth Appointment Contact List

Specialty	Clinician	Appointment	Check In	MA Contact
Audiologist	Berry, Jennifer AuD, CCC-A	217/545-8000	217/545-7070	217/545-7070
	Bussing, Anna AuD, CCC-A	217/545-8000	217/545-7070	217/545-7070
	Edmonds, Jennifer AuD, CCC-A	217/545-8000	217/545-7070	217/545-7070
	Ray, Valerie AuD, CCC-A	217/545-8000	217/545-7070	217/545-7070
	Watts, Kendra AuD, CCC-A	217/545-8000	217/545-7070	217/545-7070
Pediatrics	Faloon, Kathleen MS, CCC-A	217/545-8000	217/545-7124	217/545-7124
	Pokrzywinski, Suzi AuD, CCC-A	217/545-8000	217/545-7124	217/545-7124
	Reidy, Brittney AuD, CCC-A	217/545-8000	217/545-7124	217/545-7124
Deaf Educator	Montgomery, Caroline	217/545-8000	217/545-7124	217/545-7124
Behavioral Health	Bennett, Jeff MD	217/545-8000	217/545-8229	217/545-8229
Oncology	Fank, Patricia PsyD	217/545-8000	217/545-2538	217/545-5408
	Lane, Emily LCSW	217/545-8000	217/545-2538	217/545-5408
	Noggle, Chad PhD	217/545-8000	217/545-2538	217/545-5408
Dermatology	Stone, Stephen MD	217/545-8000	217/545-5465	217/545-0567
Endocrinology	Fratianni, Carmel MD	217/545-8000	217/545-6970	217/545-8157
	Jakoby, Michael MD	217/545-8000	217/545-6970	217/545-8157
	Poola, Rama MD	217/545-8000	217/545-6970	217/545-8157
	Burns, Cheryl RD, CDE	217/545-8000	217/545-6970	217/545-8157
	Lopinski, Sara RD	217/545-8000	217/545-6970	217/545-8157
	Smith, Sherry FNP	217/545-8000	217/545-6970	217/545-8157
	Wright, Lindsey RN, CDE	217/545-8000	217/545-6970	217/545-8157
	Yergler, Cynthia RD, CDE	217/545-8000	217/545-6970	217/545-8157
Hematology-Oncology	Desai, Meghna MD	217/545-8000	217/545-6123	217/545-1129
	Khan, Aziz MD	217/545-8000	217/545-6123	217/545-1129
	Mocharnuk, Robert MD	217/545-8000	217/545-6123	217/545-1129
	Pathak, Swati MD	217/545-8000	217/545-6123	217/545-1129
	Rao, Krishna MD	217/545-8000	217/545-6123	217/545-1129
	Sana, Sherjeel MD	217/545-8000	217/545-6123	217/545-1129
Neurology				
Memory/Alzheimer's	Ala, Thomas MD	217/545-8000	217/545-7202	217/545-7207
	Young, Charlene FNP*	217/545-8000	217/545-7202	217/545-7207
	Womack, Cindy FNP	217/545-8000	217/545-7202	217/545-7207
	Zec, Ronald PhD	217/545-8000	217/545-7202	217/545-7207
Epilepsy	Elsayed, Mona MD**	217/545-8000	217/545-7202	217/545-7207
	Murr, Najib MD	217/545-8000	217/545-7202	217/545-7207

Specialty	Clinician	Appointment	Check In	MA Contact
General Adult	DevelscHoward, Allen MD	217/545-8000	217/545-8110	217/545-8112
	Elble, Rodger MD	217/545-8000	217/545-8110	217/545-8112
	Gilchrist, James MD	217/545-8000	217/545-7202	217/545-7207
	Mueed Sajjad MD	217/545-8000	217/545-7202	217/545-7207
	Murr, Najib MD***	217/545-8000	217/545-7202	217/545-7207
Neuro-Oncology	Rauschkolb, Paula DO****	217/545-8000	217/545-7202	217/545-7207
	Johnson, Michelle NP	217/545-8000	217/545-7202	217/545-7207
Stroke Follow-up				
Vascular Neurology	Siddiqui, Fazeel MD	217/545-8000	217/545-7202	217/545-7207
	Atwood, Nicole NP	217/545-8000	217/545-7202	217/545-7207
Neurosurgery	Amin, Devin MD	217/545-8000	217/545-9451	217/545-9030
	Cozzens, Jeffrey MD	217/545-8000	217/545-9451	217/545-9030
	Espinosa, Jose MD	217/545-8000	217/545-9451	217/545-9030
Second Opinion	See website	-	-	-
Otolaryngology (ENT)	Bass, Richard MD	217/545-8000	217/545-7609	217/545-7097
	Bauer, Carol MD	217/545-8000	217/545-7609	217/545-7590
	Crosby, Dana MD	217/545-8000	217/545-7609	217/545-7590
	Ettema, Sandra MD	217/545-8000	217/545-7861	217/545-7722
	Rybak, Leonard MD, PhD	217/545-8000	217/545-7861	217/545-7725
Pediatrics				
Cardiology	Agoudemos, Melissa MD	217/545-8000	217/545-7485	217/545-1345
	Nicolas, Ramzi MD	217/545-8000	217/545-7485	217/545-1345
	Souki, Ramzi MD	217/545-8000	217/545-7485	217/545-1345
Critical Care	Basnet, Sangita MD	888/544-6464		
	Caprirolo, Giovanna MD	888/544-6464		
	Denev, Kanstantin MD	888/544-6464		
	Majcina, Ryan MD	888/544-6464		
Dev Behavior/Psych	Aylward, Glen PhD	217/545-8000	217/545-7494	217/545-7388
	Hickey, Anna PhD	217/545-8000	217/545-7494	217/545-7388
	Patterson, Janet MD	217/545-8000	217/545-7494	217/545-7388
Gastroenterology	Cox, Sybil RD, RDN, CDE	217/545-8000	217/545-7485	217/545-1345
	Mogren, Christopher FNP-BC	217/545-8000	217/545-7485	217/545-1345
	Mziray-Andrew, Charmaine MD	217/545-8000	217/545-7485	217/545-1345
	Porayette, Prashanth MD	217/545-8000	217/545-7485	217/545-1345
Primary Care	Batterman, Craig MD	217/545-8000	217/545-7485	217/545-7455
	Bennett, Gregory MD	217/545-8000	217/545-7485	217/545-1045
	Bhamidipati, Prasanta MD	217/545-8000	217/545-7485	217/545-7457
	Dela Cruz, Marthe MD	217/545-8000	217/545-7485	217/545-9227
	Mathews, Amelia MD	217/545-8000	217/545-7485	217/545-7457
	Milbrandt, Tracy MD	217/545-8000	217/545-7485	217/545-7456
	Miner, Michelle MD	217/545-8000	217/545-7485	217/545-7457
	Unal, Sheref MD	217/545-8000	217/545-7485	217/545-7455

Specialty	Clinician	Appointment	Check In	MA Contact
	Vohra, Sameer MD	217/545-8000	217/545-7485	217/545-7455
Emergency & Hospitalist	Carlson, Douglas MD	888/544-6464		
Hospitalist	Kink, Lynn MD	888/544-6464		
	Lack, Jody MD	888/544-6464		
	Lower, Tracy MD	888/544-6464		
	Majcina, Sarah MD	888/544-6464		
	Patel, Neil MD	888/544-6464		
Genetics	Groepper, Daniel CGC	888/544-6464		
Hemato/Oncology	Brandt, Gregory MD	217/545-8000	217/545-8000	217/545-8000
	Morgan, Justine FNP-BC	217/545-8000	217/545-8000	217/545-8000
	Niebrugge, Daniel MD	217/545-8000	217/545-8000	217/545-8000
Infectious Disease	Chaudhary, Subhash MD	217/545-8000	217/545-7485	217/545-7468
	Rodriguez, Marcela MD	217/545-8000	217/545-7485	217/545-7468
Neonatology	Ahamed, Mohamed	888/544-6464		
	Batton, Beau MD	888/544-6464		
	Darling, Ginger MD	888/544-6464		
	Jean-Louis, Magali MD	888/544-6464		
	Leadbetter, Kristen MD	888/544-6464		
	Majjiga, Venkata MD	888/544-6464		
	Nimavat, Dharmendra MD	888/544-6464		
	Vargas, Laura MD	888/544-6464		
Neurology	Patel, Nitin MD	217/545-8000	217/545-7485	217/545-7114
	Wildrick, Diane FNP-BC	217/545-8000	217/545-7485	217/545-7114
Pulmonology	Johnson, Mark MD	217/545-8000	217/545-1830	217/545-4889
	Shafi, Anwar MD	217/545-8000	217/545-7372	217/545-1192
Pulmonary	Bakir, Haitham MD	217/545-8000	217/545-2402	217/545-7002
	Butnariu, Daniel MD	217/545-8000	217/545-2402	217/545-7002
	Eagleton, Lanie MD	217/545-8000	217/545-2402	217/545-7002
	Henkle, Joseph MD	217/545-8000	217/545-2402	217/545-7002
	Kapitan, Kent MD	217/545-8000	217/545-2402	217/545-7002
	Song, Mingchen MD	217/545-8000	217/545-2402	217/545-7002
	Sreedhar, Rajagopal MD	217/545-8000	217/545-2402	217/545-7002
	White, Peter MD	217/545-8000	217/545-2402	217/545-7002
	Zaza, Tareq MD	217/545-8000	217/545-2402	217/545-7002
Reproductive Endo	Loret de Mola, Riccardo MD	217/545-8000	217/545-5117	217/545-3111
	Greenacre, Lisa NP	217/545-8000	217/545-5117	217/545-3111
Surgery				
General/Breast	Rea, David MD	217/545-8000	217/545-1322	217/545-1322
General/Endoscopic	Mellinger, John MD	217/545-8000	217/545-7861	217/545-7583
General/Colorectal	Poola, Prasad MD	217/545-8000	217/545-2538	217/545-1148
	Rakinic, Jan MD	217/545-8000	217/545-2538	217/545-1148
General/Oncology	Ganai, Sabha MD	217/545-8000	217/545-1322	217/545-1322
General/Transplant	Garfinkel, Marc MD	217/545-8000	217/545-7861	217/545-7725

Specialty	Clinician	Appointment	Check In	MA Contact
	Rea, David MD	217/545-8000	217/545-7861	217/545-7725
General/Trauma	Reid, Adam MD	217/545-8000	217/545-7861	217/545-7159
	Wall, Jarrod MB, BCh, PhD	217/545-8000	217/545-7861	217/545-7159
Plastic Surgery	Berry, Nada	217/545-8000	217/545-6314	217/545-7023
	Huettner, Franziska MD	217/545-8000	217/545-6314	217/545-7023
	Neumeister, Michael MD	217/545-8000	217/545-6314	217/545-7023
	Sommer, Nicole MD	217/545-8000	217/545-6314	217/545-7023
Vascular	Desai, Sapan MD, PhD, MBA	217/545-8000	217/545-5555	217/545-1383
	Hodgson, Kim MD	217/545-8000	217/545-5555	217/545-1383
	Hood, Douglas MD	217/545-8000	217/545-5555	217/545-1383
	Pan, James MD	217/545-8000	217/545-5555	217/545-1383
Transplant Nephro	West, Bradford MD	217/545-8000	-	-
Trauma	Sutyak, John MD	217/545-8000	217/545-7861	217/545-7159
Urology	Bednarchik, Cynthia FNP-BC	217/545-8000	217/545-7150	217/545-7252
	El-Zawhry, Ahmed MD, MSC	217/545-8000	217/545-7150	217/545-7793
	Grampsas, Samuel MD	217/545-8000	217/545-7150	217/545-7252
	Kohler, Tobias MD, MPH	217/545-8000	217/545-7150	217/545-7252
	McVary, Kevin MD	217/545-8000	217/545-7150	217/545-7252
	Schwartz, Bradley DO, FACS	217/545-8000	217/545-7150	217/545-7252
	Wilson, Charles MD	217/545-8000	217/545-7150	217/545-7793
Oncology	Alanee, Shaheen MD, MPH	217/545-8000	217/545-2538	217/545-1148
Pediatrics	Mathews, Ranjiv MD	217/545-8000	217/545-7150	217/545-7272

Additional Notes:

Neurology

*****-415 N 9th location Tuesday afternoon and all day Thursday

******-415 N 9th location Friday

*******-415 N 9th location Monday

********-415 N 9th location Wednesday

Pediatrics

Alternate MA Contact for Pediatric Primary Care: 217/545-7796

Alternate MA Contact for Pediatric Neurolgy: 217/545-8018

Pulmonology

Alternate Check in for Pulmonology: 217/545-7157

SIU HealthCare

Exceptional Medicine. Partners in Care.

TeleHealth Clinician Fax

Specialty	Clinician	Fax
Audiologist	Berry, Jennifer AuD, CCC-A	217/545-0253
	Bussing, Anna AuD, CCC-A	217/545-0253
	Edmonds, Jennifer AuD, CCC-A	217/545-0253
	Ray, Valerie AuD, CCC-A	217/545-0253
	Watts, Kendra AuD, CCC-A	217/545-0253
Pediatrics	Faloon, Kathleen MS, CCC-A	217/545-9716
	Pokrzywinski, Suzi AuD, CCC-A	217/545-9716
	Reidy, Brittney AuD, CCC-A	217/545-9716
Deaf Educator	Montgomery, Caroline	217/545-9716
Behavioral Health	Bennett, Jeff MD	217/545-
Oncology	Fank, Patricia PsyD	217/545-0548
	Lane, Emily LCSW	217/545-0548
	Noggle, Chad PhD	217/545-0548
Dermatology	Stone, Stephen MD	217/545-7438
Endocrinology	Fratianni, Carmel MD	217/545-9125
	Jakoby, Michael MD	217/545-9125
	Poola, Rama MD	217/545-9125
	Burns, Cheryl RD, CDE	217/545-9125
	Lopinski, Sara RD	217/545-9125
	Smith, Sherry FNP	217/545-9125
	Wright, Lindsey RN, CDE	217/545-9125
	Yergler, Cynthia RD, CDE	217/545-9125
Hematology-Oncology	Desai, Meghna MD	217/545-1411
	Khan, Aziz MD	217/545-1411
	Mocharnuk, Robert MD	217/545-1411
	Pathak, Swati MD	217/545-1411
	Rao, Krishna MD	217/545-1411
	Sana, Sherjeel MD	217/545-1411
Neurology		
Memory/Alzheimer's	Ala, Thomas MD	217/545-4282
	Young, Charlene FNP*	217/545-4282 & 545-8115 Thur
	Womack, Cindy FNP	217/545-4282
	Zec, Ronald PhD	217/545-4282
Epilepsy	Elsayed, Mona MD**	217-545-4282
	Murr, Najib MD	217/545-4282

Specialty	Clinician	Fax
General Adult	DevelscHoward, Allen MD	217/545-8115
	Elble, Rodger MD	217/545-8115
	Gilchrist, James MD	217/545-4282
	Mueed Sajjad MD	217/545-4282
	Murr, Najib MD***	217/545-4282
Neuro-Oncology	Rauschkolb, Paula DO****	217/545-4282
	Johnson, Michelle NP	217/545/4282
Stroke Follow-up		
Vascular Neurology	Siddiqui, Fazeel MD	217-545-4282
	Atwood, Nicole NP	217/545-8115
Neurosurgery	Amin, Devin MD	217/545-9719
	Cozzens, Jeffrey MD	217/545-9719
	Espinosa, Jose MD	217/545-9719
Second Opinion	See website	
Otolaryngology (ENT)	Bass, Richard MD	
	Bauer, Carol MD	
	Crosby, Dana MD	
	Ettema, Sandra MD	
	Rybak, Leonard MD, PhD	
Pediatrics		
Cardiology	Agoudemos, Melissa MD	217/545-8105
	Nicolas, Ramzi MD	217/545-8105
	Souki, Ramzi MD	217/545-8105
Critical Care	Basnet, Sangita MD	
	Caprirolo, Giovanna MD	
	Denev, Kanstantin MD	
	Majcina, Ryan MD	
Dev Behavior/Psych	Aylward, Glen PhD	
	Hickey, Anna PhD	
	Patterson, Janet MD	
Gastroenterology	Cox, Sybil RD, RDN, CDE	217/545-9759
	Mogren, Christopher FNP-BC	217/545-9759
	Mziray-Andrew, Charmaine MD	217/545-9759
	Porayette, Prashanth MD	217/545-9759
Primary Care	Batterman, Craig MD	217/545-0130
	Bennett, Gregory MD	217/545-0130
	Bhamidipati, Prasanta MD	217/545-0130
	Dela Cruz, Marthe MD	217/545-0130
	Mathews, Amelia MD	217/545-0130
	Milbrandt, Tracy MD	217/545-0130
	Miner, Michelle MD	217/545-0130
	Unal, Sheref MD	217/545-0130

Specialty	Clinician	Fax
	Vohra, Sameer MD	217/545-0130
Emergency & Hospitalist	Carlson, Douglas MD	
Hospitalist	Kink, Lynn MD	
	Lack, Jody MD	
	Lower, Tracy MD	
	Majcina, Sarah MD	
	Patel, Neil MD	
Genetics	Groepper, Daniel CGC	
Hemato/Oncology	Brandt, Gregory MD	
	Morgan, Justine FNP-BC	
	Niebrugge, Daniel MD	
Infectious Disease	Chaudhary, Subhash MD	217/545-5018
	Rodriguez, Marcela MD	217/545-5018
Neonatology	Ahamed, Mohamed	
	Batton, Beau MD	
	Darling, Ginger MD	
	Jean-Louis, Magali MD	
	Leadbetter, Kristen MD	
	Majjiga, Venkata MD	
	Nimavat, Dharmendra MD	
	Vargas, Laura MD	
Neurology	Patel, Nitin MD	217/545-5018
	Wildrick, Diane FNP-BC	217/545-5018
Pulmonology	Johnson, Mark MD	217/545-5018
	Shafi, Anwar MD	217/545-5018
Pulmonary	Bakir, Haitham MD	217/545-4734
	Butnariu, Daniel MD	217/545-4734
	Eagleton, Lanie MD	217/545-4734
	Henkle, Joseph MD	217/545-4734
	Kapitan, Kent MD	217/545-4734
	Song, Mingchen MD	217/545-4734
	Sreedhar, Rajagopal MD	217/545-4734
	White, Peter MD	217/545-4734
	Zaza, Tareq MD	217/545-4734
Reproductive Endo	Loret de Mola, Riccardo MD	
	Greenacre, Lisa NP	
Surgery		
General/Breast	Rea, David MD	217/545-7442
General/Endoscopic	Mellinger, John MD	
General/Colorectal	Poola, Prasad MD	217/545-0952
	Rakinic, Jan MD	217/545-0952
General/Oncology	Ganai, Sabha MD	
General/Transplant	Garfinkel, Marc MD	

Specialty	Clinician	Fax
	Rea, David MD	
General/Trauma	Reid, Adam MD	
	Wall, Jarrod MB, BCh, PhD	
	Wohltmann, Christopher MD	
Plastic Surgery	Berry, Nada	
	Huettner, Franziska MD	
	Neumeister, Michael MD	
	Sommer, Nicole MD	
Vascular	Desai, Sapan MD, PhD, MBA	217/545-1366
	Hodgson, Kim MD	217/545-1366
	Hood, Douglas MD	217/545-1366
	Pan, James MD	217/545-1366
Transplant Nephro	West, Bradford MD	
Trauma	Sutyak, John MD	217/545-7795
Urology	Bednarchik, Cynthia FNP-BC	217/545-7255
	El-Zawhry, Ahmed MD, MSC	217/545-7255
	Grampsas, Samuel MD	217/545-7255
	Kohler, Tobias MD, MPH	217/545-7255
	McVary, Kevin MD	217/545-7255
	Schwartz, Bradley DO, FACS	217/545-7255
	Wilson, Charles MD	217/545-7255
Oncology	Alanee, Shaheen MD, MPH	
Pediatrics	Mathews, Ranjiv MD	

Technology Report Form

1. SCOPE

1.1. System Wide: This procedure applies to all regional telepresenters working with SIU HealthCare providers and SIU HealthCare's partner TeleHealth organizations providing care via TeleHealth.

2. PURPOSE

2.1. To outline the process for accessing the Technology Report Form, completing the TeleHealth Technology Report Form, the information that will be needed by the Telepresenter.

3. DEFINITIONS & EXPLANATIONS OF TERMS

3.1. Technology Report Form: the form is used to document visits with the patient and what, if any issues occurred during the visit.

3.2. MHN: indicates **SIU** Medical History Number.

3.3. Audio jitter: when sound being transmitted is of poor quality, echo is present, delay in mouth moving and sound being heard occurs, or sound being transmitted is heard intermittently.

3.4. Video jitter: when image being transmitted is of poor quality, delay in movement appearing on screen or appearing jerky, or image appearing intermittently.

3.5. Frozen picture: the picture does not change or move.

3.6. No Audio: there is a picture on screen but no sound being transmitted

3.7. No Video: there is sound but the screen is blue or black.

4. PROCEDURE BODY

All clinical staff responsible for presenting of patients to all SIU Specialties shall be proficient and appropriately trained in completing the TeleHealth Technology Report Form via TeleHealth technologies.

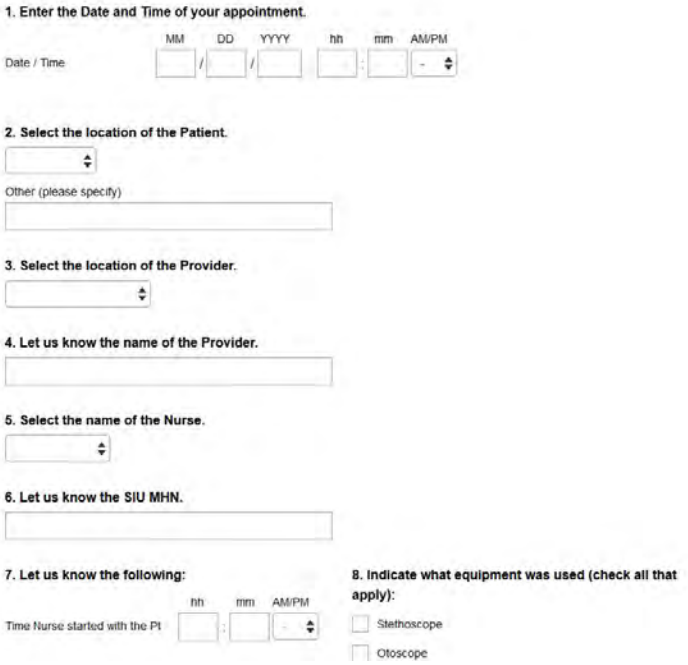
4.1. Accessing Technology Report Form:

a. To access the TeleHealth Technology Report Form, go to www.siumed.edu.

b. Once the SIU School of Medicine home page is on the desktop, click on Departments in the top right corner.

c. Select TeleHealth and Video Services Department.

4.2. Fill in the designated areas as indicated.



a. Date needs to be filled in using a two digit month, two digit day, and four digit year (i.e. mm/dd/yyyy).

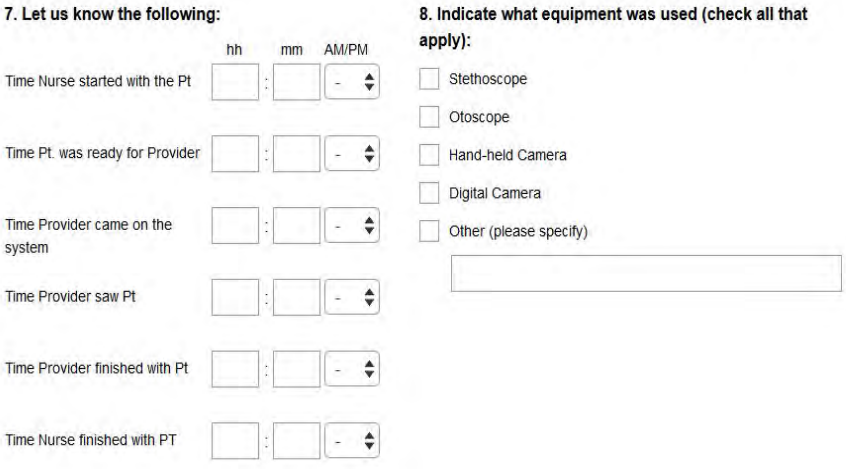
b. All time fields throughout the form need to be expressed in military time (i.e. 2:00pm would be 1400).

c. Patient site: select the patient location.

d. Provider: free text the name of the provider seeing the patient.

e. Nurse: select the TeleHealth nurse from the drop down menu.

f. MHN: type in the **SIU MHN**.



g. Presenter start time is the time the TeleHealth nurse calls the patient back to prep for the consult.

h. Presenter time patient ready: is the time the TeleHealth nurse was finished prepping the patient for the TeleHealth

consult.

i. Time Provider saw Patient: is the time the provider exam of the patient begins

j. Time Provider finished with patient: is the time the provider exam of the patient ends

k. Presenter stop time: is the time the consult ends.

4.3. Equipment Issues

a. Indicate what equipment was used by clicking next to the box in front of the equipment (i.e. stethoscope, otoscope, hand held video camera, digital camera).

b. If no equipment was used, do not check any of the listed items.

c. Technology problems; select “None" if no problems occurred. Otherwise, indicate the problems that occurred by clicking next the box in front of the problem. Multiple boxes may be checked.

d. Indicate if the problems were with the Provider site or Patient site or both.

e. Action Taken; check the box in front of what action was taken to resolve the problems. If no action taken, do not check any box.

f. Comments: any comments can be entered in the "Comments" box.

g. Click on the submit button located at the bottom of the page when finished.

h. If you have problems or questions regarding the form, please call the TeleHealth Help Line at **(217)545-8600**

5. ADDITIONAL RESOURCES

5.1. Additional Questions:

Dr. Nina M. Antoniotti, RN, MBA, PhD
(217)545-3830
Executive Director of TeleHealth and Clinical Outreach, SIU HealthCare

Shantel Brown, RN, BS
(217)545-3153
TeleHealth Clinical Coordinator, SIU HealthCare

Appointment Referral Process

1. SCOPE

1.1. This procedure applies to all regional telepresenters working with SIU Health Care providers, SIU Health Care's partner TeleHealth organizations providing care via TeleHealth, and SIU appointment staff.

2. PURPOSE

2.1. To outline the process for TeleHealth patient sites to obtain a referral appointment for a patient via TeleHealth with an SIU provider.

3. PROCEDURE

3.1. This procedure outlines the requirements for referral and registration of a patient receiving care via TeleHealth from an SIU provider, including patient health information, insurance information, NPR, and consent to treat if necessary (new patients only).

3.1.1. TeleHealth patient site requesting an appointment with a specific specialistfor a patient shall call the SIU Call Center at 1-800-342-5748 Monday through Friday from 8:00 am to 4:30pm, and request a TeleHealth appointment with the specialty.

3.1.2. At the time of the referral request, Call Center staff will forward the caller to the appropriate appointment pod in the appropriate division.

3.1.3. The Division appointment staff will:

a. <u>New Patients to SIU</u>:
   i. Register the patient as a new patient and make an appointment for the patient; or
   ii. Register the patient as a new patient and create a temporary appointment.

b. <u>Established Patients to SIU</u>:
   i. Make an appointment for the patient; or
   ii. Create a temporary appointment

3.1.4. The following information must be available at the time of the referral request:

a. Patient name, address, phone number, and emergency contact;
b. Patient's insurance provider including group and subscriber numbers; and
c. PCP diagnosis.

d. A copy of the last dictation from the PCP and appropriate labs and x-ray reports are also requested prior to the date of the appointment.

3.1.5. Prior to the day of the appointment, a copy of the patient's insurance cards, driver's license (if the patient has one), and a copy of the labs, radiology reports, and the primary care clinician's dictated note regarding the patient's current problem, must be faxed to the respective appointment desk.

3.1.6. If the registration information is not received prior to the day of the appointment, the telepresenter must fax the information on the day of the appointment but prior to the time of the appointment.

3.1.7. If the information is not received prior to the appointment, the patient may not be able to be seen.

3.1.8. The follow-up appointment will be scheduled by the SIU provider office.

4. ADDITIONAL RESOURCES

4.1. Additional Questions:

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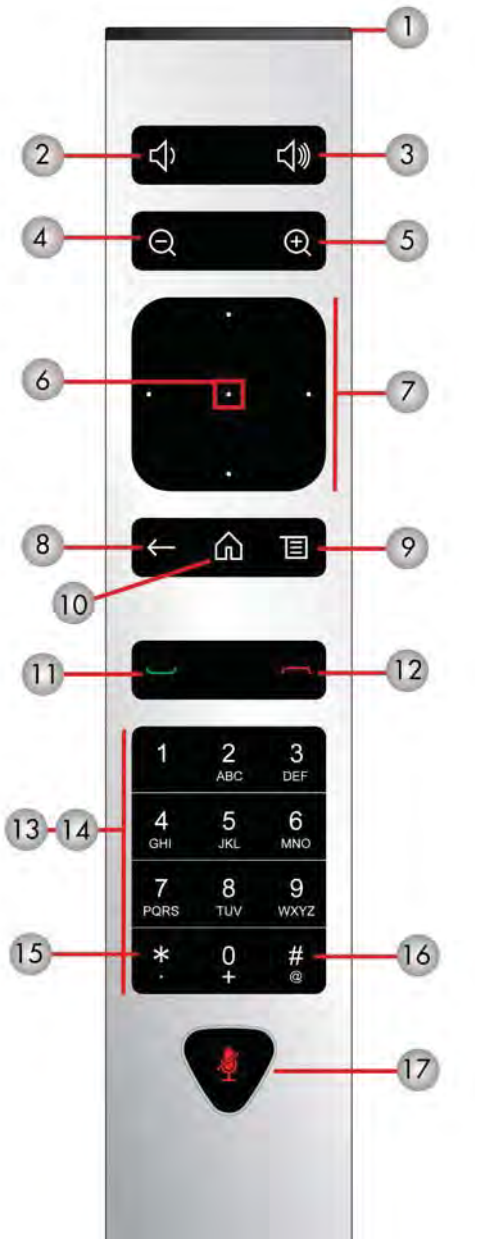
Remote Control Buttons and Descriptions

Descriptions of the remote control parts are shown in the following table and corresponding graphic.

Remote Control Button Descriptions

Number	Description
1	LED IR emitter
2	Decrease speaker volume.
3	Increase speaker volume.
4	Zoom camera out.
5	Zoom camera in.
6	Press center **Select** button to select highlighted menu item.
7	Navigate through menu items using the Up, Down, Left, and Right buttons; pan/tilt the camera.
8	Delete letters or numbers or go back to a previous screen.
9	Display the Menu screen.
10	Return to the Home screen.
11	Place, answer call.
12	End, reject call.
13	Enter letters or numbers.
14	In camera control mode, move the camera to a stored preset or press and hold a number to store a preset.
15	• Generates an asterisk if the cursor is in a text field. • Generates a period if the cursor is in a numeric field.
16	Generates touch (DTMF) tones. Press #, followed by DTMF keys to send
17	Mute or unmute a microphone.

Parts of the Remote Control



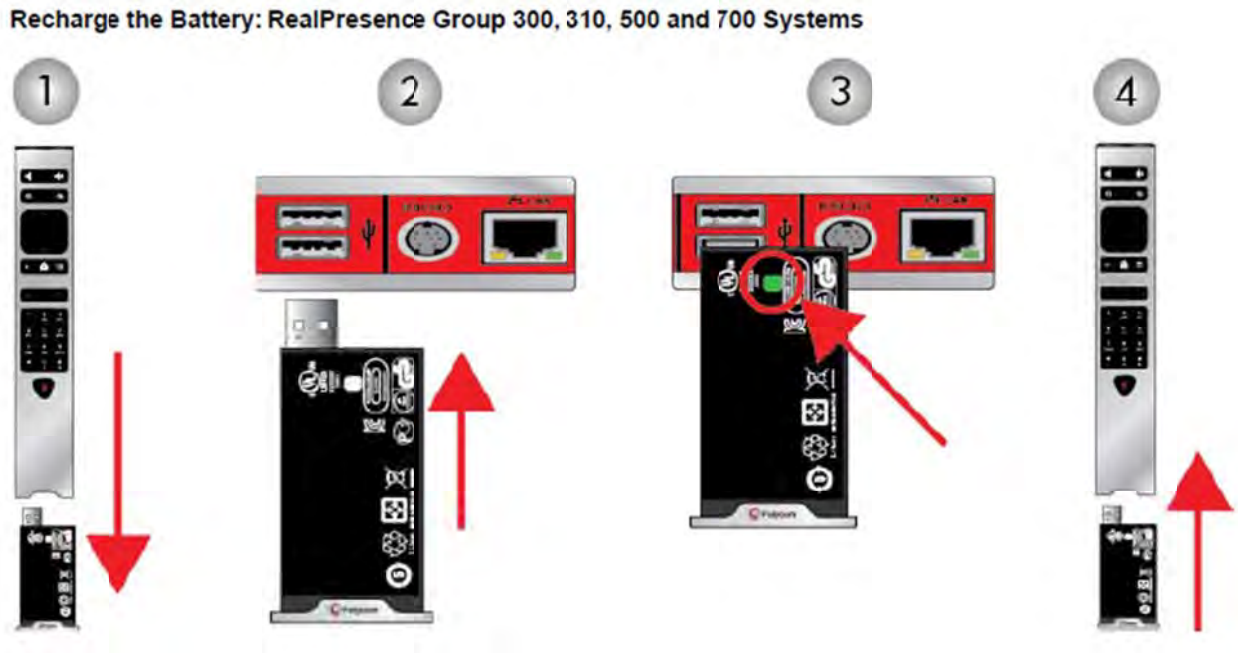
Recharge the Remote Control Battery:

Your system setup sheet shows how to charge the battery in the remote control the first time. When the remote control battery power is at 10% or less, a notification displays on the home screen. Although other notifications might override the low battery notification, the low battery notification returns after the other notifications are dismissed. The low battery notification does not display while the system is in a call.

Use a USB 2.0 port to charge the remote battery. The Polycom Videoconfrence unit has two USB 2.0 ports on the back of each system.

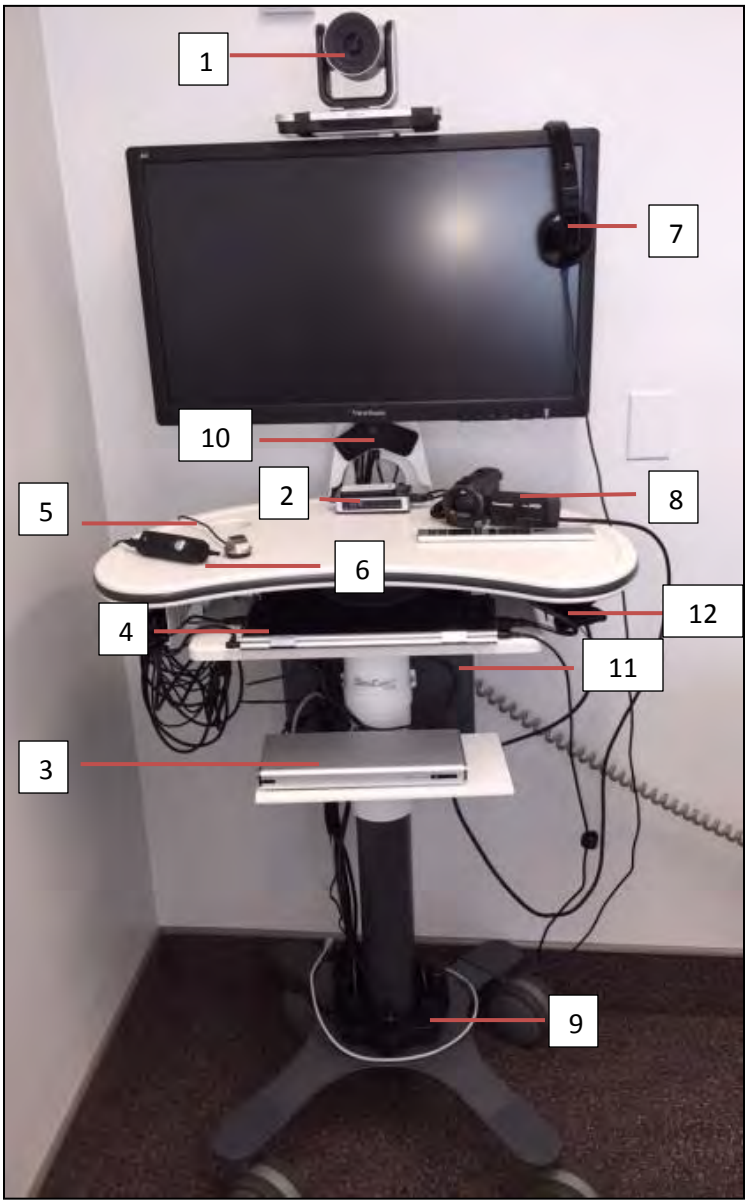
To recharge the remote control battery:

1. Pull the battery out of the end of the remote control.
2. Insert the USB plug of the battery into a USB 2.0 port such as the one on your system.
3. Wait until the status light on the battery turns green before removing it from the port. Recharging the battery might take from 20 minutes to multiple hours.
4. Insert the charged battery into the remote control.



Operating TeleHealth Cart

1)	Patient Camera (sends patient image to provider)
2)	HDMI Switch Box & Remote
3)	Codec
4)	Computer (controls software and peripherals
5)	Stethoscope
6)	Otoscope
7)	Headphones
8)	Video Camera
9)	Power Strip
10)	Speaker
11)	Basket
12)	Height Adjustment lever



1. When using the cart:
    a. Cart should always be plugged in and on
    b. Laptop should always be on (14)
    c. Television can be turned off between visits
2. Use the height adjustment lever to raise and lower the level (12)of the camera in order to help frame the patient and maintain eye contact(lower if in chair, raise for tall exam table)
3. Peripherals (5,6,8) should always be stored in a safe location when the presenter is not using them and locked location when finished with exams for the day

Communicating Over Video

1. SCOPE

1.1. System Wide: This procedure applies to all regional telepresenters working with SIU HealthCare providers and SIU HealthCare's partner TeleHealth organizations providing care via TeleHealth

2. PURPOSE

2.1. To outline the process for communicating over video via TeleHealth audio and video equipment to ensure the video and audio quality is maintained for a TeleHealth visit and to outline equipment and procedures for doing so.

3. DEFINITIONS & EXPLANATIONS OF TERMS

3.1. **Communication**: is the activity of conveying information through verbal and non-verbal ques.

4. POLICY BODY

Communicating over video is simple and brings people closer together when long distances prevent people being in the same room. Communicating over video, although quite easy, is not exactly like being in the same room. Remembering these few tips will help the video conference go much smoother and everyone will feel a sense of presence of the people participating in the conference.

4.1. Always frame yourself to look like a TV broadcaster.

a. Make sure that your face is lit.

b. Speak in a normal tone.

c. People want to see you! Most people are camera shy and it may be difficult, but it is important for all to be able to see you.

4.2. Don't be afraid to use the camera to focus on people who are talking to the group. This will help improve communication and foster interaction.

4.3. Remember that even though others are not in the room with you, they ARE in the room with you. Don't do anything while attending a video-conference that you wouldn't do if others were in the room with you.

4.4. Hearing well is an important part of video conferencing. Make sure to mute your microphone when you are eating lunch, rustling papers, or generally making any sort of noise on your end, unless you are speaking.

a. For highly interactive discussions, turn the microphone "ON", remember to keep

other noise to a minimum.

4.5. Although video conferencing is very visual; it really is about listening.

a. Remember to let the person on the video finish talking before you start.

b. Talking over someone else is not only rude, but will not allow the sound to come through.

c. Most times, the person on video will not hear what you have said when you talk at the same time they are speaking.

d. If two people talk at the same time, good manners are for both parties to stop talking, and if one party will indicate to the other with hand signals, to go ahead and speak.

e. Someone needs to take the lead, which means to stop talking and allow the other person to go first.

4.6. Do not move the microphone after the video system is turned on and several minutes have passed.

a. Do not move the microphone to each speaker as this confuses the system.

b. If during the conference a party cannot hear, speak up by lifting your chin and just speaking slightly louder. No need to yell.

c. If you cannot hear the other side, ask them to speak up or you may turn up the volume.

4.7. When leaving an interactive session, announce to the group that you must leave. This helps the conference go smoother for others at remote sites

5. ADDITIONAL RESOURCES

5.1. Additional Questions:

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Operational Procedure

1. SCOPE

1.1. System Wide: This procedure applies to all regional telepresenters working with SIU HealthCare providers and SIU HealthCare's partner TeleHealth organizations providing care via TeleHealth

2. PURPOSE

2.1. To outline the process for obtaining and setting up TeleHealth equipment, videoconference system, and cameras for any TeleHealth visit and to provide direction to the visit in order to improve efficiencies for the patient, provider and TeleHealth nurse.

3. DEFINITIONS & EXPLANATIONS OF TERMS

3.1. Codec: refers to the clinical video conferencing device or software. Sometimes used interchangeably with Polycom.

3.2. TeleHealth Consult: is used interchangeably with TeleHealth visit. It refers to any TeleHealth appointment.

3.3. Combined Medical Record (CMR): refers to the online electronic medical record.

3.4. Speaking with extra volume (over modulating) causes distortion at the other site.

4. PROCEDURE BODY

To serve as a guide for obtaining and setting up TeleHealth equipment, videoconference system, and cameras for any TeleHealth visit. The intent of this guideline is to provide direction to the visit in order to improve efficiencies for the patient, provider and TeleHealth nurse.

4.1. Preparing for a TeleHealth Consult:

a. Review patient records.

b. Prepare any forms needed for the TeleHealth visit (i.e. Sleep Disorder Questionnaire, Pain Questionnaire, Health History forms, etc).

c. Technology Report Form: complete as much of the information as possible before the visit.

4.2. Preparing the room for a TeleHealth consult:

a. log in to the laptop using "telehealth" as the password

b. Position: position the chair(s) or the exam table for optimum viewing.

c. Light: If exam lighting is needed, turn on the Halogen lamp or exam lamp about 30 minutes prior to visit to fill the room with light. If exam room has windows, close the blinds.

d. Background: the background behind the patient should be clear of pictures, objects, shelves, etc. to minimize distractions for the provider. Video blue is the optimum background.

e. Noise: Turn bell down on phone, after the patient and provider are connected for visit.

f. Interruptions: Put sign up "TeleHealth Visit in Progress" outside the door.

4.3. Preparation and set-up of videoconference system:

a. At the first of every month (prior to any TeleHealth appointments), reboot the video codec/Polycom by turning off device, waiting 10 seconds and turn back on.

- To turn device off
  - Touch power sensor on the front of the system (not the television) until the light indicator changes color
    - Blue: On
    - Flashing Amber: shutting down

b. Turn on TV.

c. Check volume level on TV using the volume control on the TV. Volume should be mid-level. Volume may be adjusted as needed during the consult.

d. Check the volume on the Polycom by using the Polycom remote. Volume on the Polycom should be mid-level. Never turn the Polycom volume up more than 2/3 as the audio will distort. If more volume is needed during the consult, turn up the TV.

e. The TV screen should show the Polycom menu.

f. If the TV stays black, press "MENU" on the Polycom remote. The menu should appear.

g. If the screen is still black, check to see that the Polycom Codec is turned on. A green light is lit on the front when the codec is on.

h. A picture of the room should appear in the video display window.

4.4. Use of room camera remote control: (Please refer to document the Remote guide)

a. Locate the Polycom codec (room camera) remote.

b. To adjust camera(s), press the navigation buttons on the remote to move the

camera up, down, left, or right.

c. Use the zoom buttons on the camera to zoom in or pan out. Press the "+" button and the camera will zoom in. To pan out, use the "-".

d. To adjust the volume you hear from far the far site, use the volume buttons located at the top of the remote.

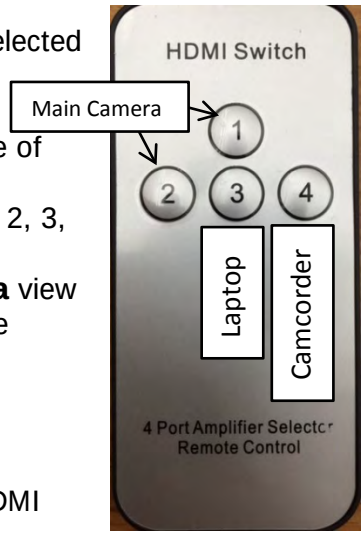
e. To mute the microphone, press the black triangular button located under the number pad on the remote. The button may have a red microphone with a slash through it.
- The red mute indicator light is on when the system is muted
- Muting the microphone **does not** mute audio coming from any device connected to the content audio inputs

f. When the remote control battery power is at 10% or less, a notification displays on the home screen. This will require the removable battery to be recharged.

4.5. Connection of peripheral cameras to videoconference system:

a. Auxiliary camera sources are attached to a USB cord or HDMI extension cable.

b. Camera sources attaching directly to the Polycom are selected by the use of the "HDMI Switch" remote control.



c. To access a peripheral that is connected through the use of the laptop and USB cords:
- Utilizing the "HDMI Switch" remote, select either 1, 2, 3, or 4
  - **1 or 2** will return you to the **main camera** view
  - **3** will allow you to share the content on the laptop **(otoscope)**
  - **4** will allow you share the content on the **handheld camera** (otoscope)

d. To stop using peripherals simply press 1 or 2 on the "HDMI Switch" remote

4.6. Starting the consult:

a. The patient will check in to Reception following standard clinic procedures and will wait in the waiting room until called by the TeleHealth nurse.

b. Introduce yourself to the patient if it is the first visit and escort the patient to the exam room.

c. Explain the TeleHealth consult to the patient if it is the first visit. Give the patient an opportunity to ask questions about the videoconferencing system and any aspect of the visit.

Step 1: Orient the patient to the videoconference system.

Step 2: displayed on the full screen while the full screen picture of the patient that is displayed to the clinician is on a small inset window on their screen.

Step 3: Explain the functioning of the audio in videoconferencing. Only one site can speak at a time. Any sound made while a provider is speaking may cause temporary break up of sound. Tell the patient if any part of the conversation breaks up or is missed, the provider can be asked to repeat or clarify after he or she is done with their statement.

Step 4: Explain the delay in audio signal and how this affects communication.

Step 5: Ask the patient to let the TeleHealth nurse know if they are having a hard time hearing the provider. The volume can be adjusted.

Step 6: Explain that privacy is very important and that no one else is viewing the visit. The visit is not videotaped. If the patient would like to discuss something with the provider in private, s(he) should feel free to ask the TeleHealth nurse to step outside the room.

Step 7: If the patient is hesitant to talk, encourage them to look at the TV and pretend the provider is in the room.

Step 8: Encourage the patient to speak in a normal tone of voice.

Step 9: If the patient has been hesitant to ask questions during the visit, or you know they have a question they have not asked, encourage them to do so when the visit is concluding.

Step 10: If the patient or other participants are making noise while the provider is speaking and sound is breaking up, remind them to be quiet.

d. Frame the patient in the center of the screen so that the face and shoulders are visible, with a small space above the head.

e. During the interview, orientation process, note any questions or concerns the patient may have.

g. At the conclusion of the consult/visit: give the patient evaluation forms with a postage paid, self-addressed envelope if it is their first TeleHealth consult/visit, or if they are using a new type of technology.

h. Complete the TeleHealth Technology Report Form. Route to SIU campus TeleHealthOffice

i. If technology problems are experienced before or during a TeleHealth consult/visit that require immediate assistance anytime between 0800 and 1630:

Step 1: call SIU Telehealth: 217-545-8600

Step 2: If technology problems occur that have been resolved or do not interrupt the visit, complete the Self-Help desk technology report for each problem.

5. ADDITIONAL RESOURCES

5.1. Additional Questions:

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Thinklabs One
Digital Stethoscope

Quick Reference Guide

Congratulations. You now own a state of the art auscultation instrument made with advanced technology and fine materials. Thinklabs One is designed for the most discerning users who seek the highest quality.

This Quick Reference is your initial guide to using your Thinklabs One. The best designed products are easy to use, with more advanced features hidden below the surface, available to those who require them. Use this Guide to familiarize yourself with the basic functions and then go to our website to explore One in more depth, according to your needs.

Go to http://thinklabsone.com/manual for detailed User's Manual
http://thinklabsone.com/support for Customer Support

ⓘ Tips for Optimal Use

Instructions - There's a lot more to learn - see http://thinklabsone.com/manual

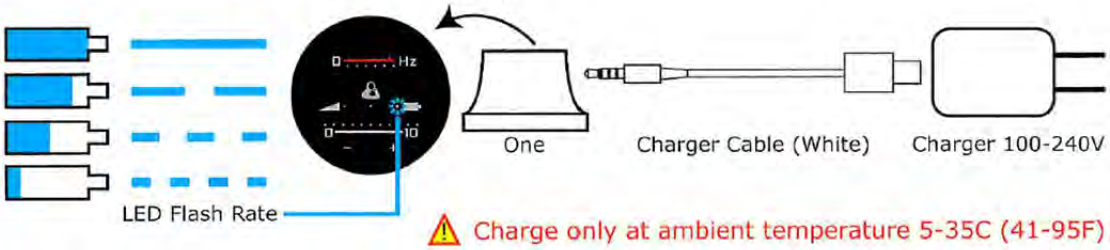
Sound Levels - Do not set your stethoscope volume louder than necessary. Adjust volume so that heart and lung sounds are clear and comfortable to hear. Protect your hearing!

Diaphragm Pressure and Skin Contact - Making skin contact will provide you with the best sound quality. If you do listen through clothing, avoid listening through thick garments.

Headphone Fit - Make sure your headphones are as sealed as possible against outside noise to enhance your listening. Use Thinklabs headphones or other high quality headphones.

Cleaning - Use alcohol or other cleaning agents, but do not allow liquids inside **One**.

I. Charger Connection



⚠ Charge only at ambient temperature 5-35C (41-95F)

Controls & Display

1. Power On / Off

Power On - Hold ANY Key until power turns on.

Power Off - Push & Hold ⓐ and ⊖ simultaneously for 2 seconds, then release.

Auto Shutoff - Your **One** will shut off automatically after preset auto shutoff time.

Battery Level flashes at Power Off

2. Volume Control & Display

Click ⊖ or ⊕ to adjust Volume Level.
Hold keys to step quickly up or down.

⚠ To reduce risk of tinnitus or hearing loss, listen at moderate volume levels.

3. Filter Selection & Display

ⓘ
- Filters selectively amplify low,medium or high-pitched sounds, to select for low-pitched heart sounds, mid-range murmurs or high-pitched lung sounds. **One** has multiple filters for greater control over sound than stethoscopes limited to the choice between Bell or Diaphragm.
- Pitch (i.e. frequency) is measured in Hertz (Hz) and displayed graphically on a low-to-high Hz Scale, which shows relative frequency range - filters that amplify low-pitched sounds show LEDs towards the left, filters for higher pitched sounds show LEDs towards the right.
- See http://thinklabsone.com/filters for further explanations and details.

Hz Scale shows pitch range of filter selection

Select Filter - a. Hold ⓕ Key for ~2 seconds.
b. Release Key when LEDs change.
c. Repeat to cycle through filters.

Set two "Favorite Filters" - select 1st filter, select 2nd filter, then alternate easily between the two selections:

1. Select 1st Favorite - Steps a through c above.
2. Click (do not hold) ⓕ Key.
3. Select 2nd Favorite - Steps a through c again.
4. Click (do not hold) ⓕ Key to alternate between Favorites.
5. To use any other filter, simpy do Steps a through c anytime and the Favorite you're currently using will be changed.

4. Battery Level Check

To Check Battery Level:
1. Push any key to Power On.
2. Push & Hold ⓐ and ⊖ simultaneously for 2 seconds.
3. Battery Level flashes across 0-10 Scale when **One** powers off.

ⓘ Typical battery life in use ~ 240 minutes active listening.
Standby/Power Off time > 4 weeks.

5. Setting Auto Shutoff Time

Start with **One** in the Power Off condition.
1. Turn Power On.
2. Click ⓐ Key once for each minute of the desired auto shutoff time.
   For example, click ⓐ Key 3 times for a 3 minute shutoff time.
3. Push and HOLD ⓐ Key until One shuts off (~10 seconds).

ⓘ
- Factory Default = 2 minute auto shutoff time.
- Allowable range is one to ten minutes (1 - 10 clicks).
- To DISABLE Auto Shutoff (unit stays on), do 12 Clicks in step 2 above.

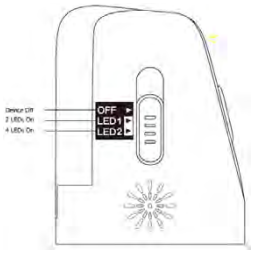
Preparing and Using USB Otoscope

USB Otoscope Instructions:

FireflyPro is the software that is used for the USB Otoscope

1) Using the HDMI remote, select 

2) Turn the Otoscope on using the switch towards the rear of the device. (Turn the switch to off when finished with scope)



3) Open the FireflyPro software by double clicking the icon 

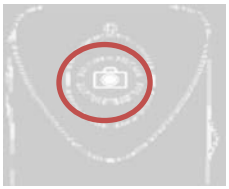
4) When using the device, it is recommended that you hold the device with the transparent cover forward with your thumb on the equipment leaving the index finger free to rotate and adjust the focus wheel.

5) Using controls on otoscope (Refer to Scope Image and Tool bar)

a. **Focus**: based on relative distance of the observed object, the focus wheel can be turned left for higher magnification. If larger field of view is needed, the focus wheel can be turned to the right.
   - To focus, begin with focus wheel in the default position (arrow on **50**)

b. **Brightness**: If brightness needs adjusted, the knob on the rear left side of the scope can be turned to increase or decrease brightness.

c. **Capturing Image**: To capture an image, press and release the capture button. A shutter sound will be made as confirmation of image capture.



6) Plug specula into round, concave guide. Ensure tight fit before use. Pull specula to remove.

7) When finished, turn off scope, close software and clean if needed.

*****IT IS IMPORTANT TO ALWAYS LOGOUT OF SOFTWARE AND NOT MINIMIZE ON YOUR TOOLBAR*****

****ONLY CLEAN WITH DRY CLOTH WEEKLY! NO LIQUIDS****

Image Window

Additional Questions:

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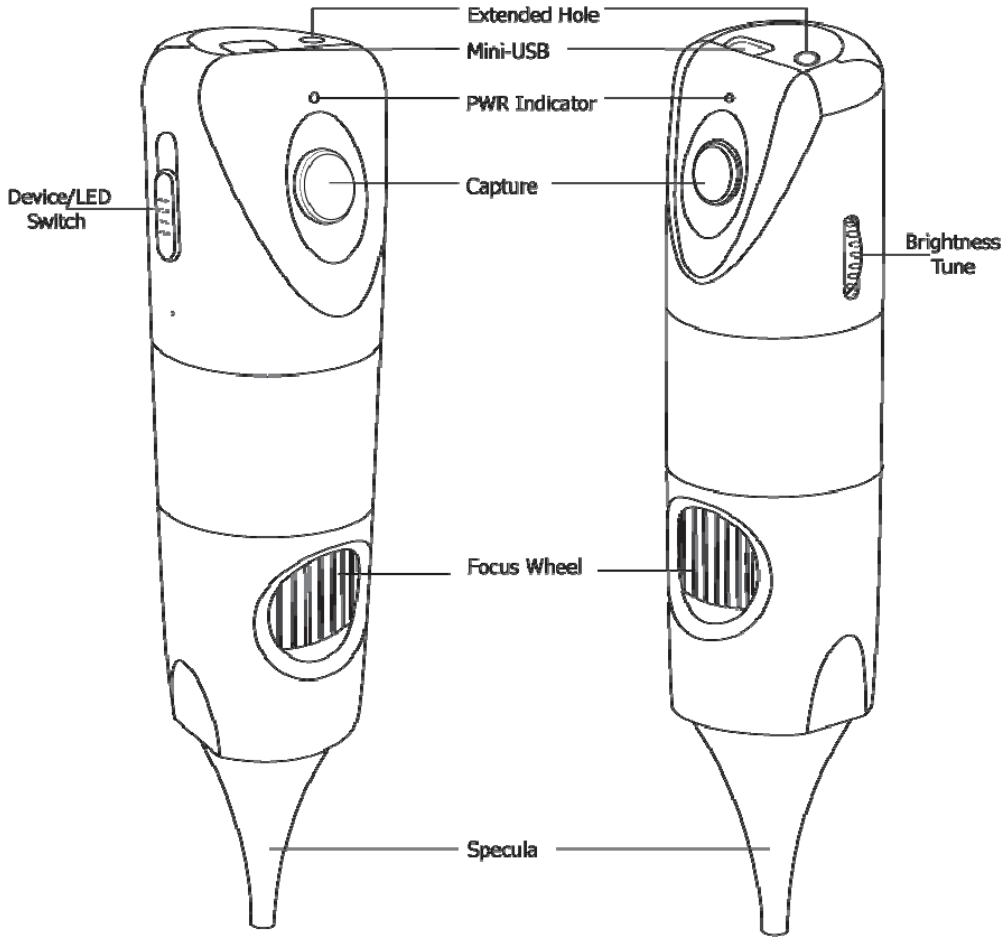
NOMENCLATURE



Preparing and Using HDMI Handheld Video camera

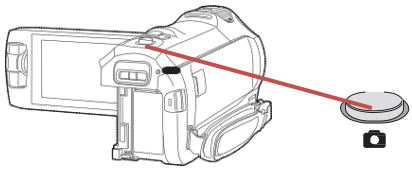
HDMI Handheld Video camera instructions:

1) Make sure the device is connected to the HDMI input box located under the television screen on the top of the cart

2) Turn device on

3) To use the device, switch the input by using the "HDMI Switch" remote and selecting 4

4) When in picture mode, press the camera button half way for auto focus. Once focused, press the button fully



5) If images are to be downloaded, remove the memory card from the SD card slot located on the bottom of the device and send to provider.

6) Delete images when done and place memory card back in camera.

7) To charge the battery, connect the DC cable to the DC input terminal located on the opposite side of the camera screen. The other end of this cable will connect to USB hub located behind the television screen. The battery capacity indication is located in the upper right corner of the video camera screen. If there is less than 3 minutes remaining, the battery will have one cell and will turn red.

Additional Questions:

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Maintaining Technical Integrity

1. SCOPE

1.1. System Wide: This procedure applies to all regional telepresenters working with SIU HealthCare providers and SIU HealthCare's partner TeleHealth organizations providing care via TeleHealth

2. PURPOSE

2.1. To outline the process for TeleHealth patient sites to ensure the video and audio quality is maintained for a TeleHealth visit and to outline equipment and procedures for doing so.

3. DEFINITIONS & EXPLANATIONS OF TERMS

3.1. TeleHealth Nurse (THN): is the clinical presenter of the patient at the remote patient site and has a direct patient-provider relationship.

3.2. Information Systems Technician (IS): is a non-clinical staff member whose primary responsibility is to maintain the integrity of the video network, hardware and respond to Helpline calls.

3.3. Interactive TeleHealth Consult: is a real time, two-way interaction with audio and video, between a patient and consulting provider.

3.4. SIU TeleHealth runs on the proprietary IS network of dedicated bandwidth of 100Mbps.The hardware and software are all HIPAA compliant as well as the human systems responsible for operation and maintenance of the network.

4. POLICY BODY

The policy is to ensure that video and audio quality is maintained at a level sufficient for clinical care during interactive TeleHealth consultations.

4.1. Responsibilities

a. The TeleHealth nurse is responsible for ensuring the integrity of the quality of audio and video during a clinical consultation between a provider and a patient.

b. The TeleHealth Director ensures adequate training in equipment use, communication techniques, and interactive styles successful for communicating clinic information over TeleHealth technologies for providers and the TeleHealth nurses.

c. The TeleHealth nurse ensures adequate communication during a clinical consult via TeleHealth technologies between the patient and the consulting provider.

d. The IS department is responsible for maintaining the integrity of the video network including the network and all hardware.

4.2. The role of the TeleHealth nurse in maintaining technical integrity:

a. Demonstrates sufficient clinical competency in the proper use of videoconferencing equipment and in trouble shooting problems during a consultation.
b. Instruct patients how to communicate via TeleHealth technologies prior to consultation.
c. Observes communication between the consulting provider and patient during the consultation with the exception of Psychiatry consults or for those in which the patient requests the TeleHealth nurse leaves the room.
d. In the instance the nurse is asked to leave the room during a consult:

Step 1: The nurse will ensure all equipment is working properly before leaving.

Step 2: The nurse will stay for a brief introductory period to ensure two-way communication with the provider.

Step 3: The nurse will inform the patient where s/he will be in the event that technical difficulties occur.

e. If the TeleHealth nurse determines that the provider and the patient did not have proper two-way communication due to technical difficulties or speaking at the same time, the nurse will ask the patient or provider to repeat any necessary information.
f. If the quality of the audio or video is insufficient enough to recreate the interaction experienced in- person is acceptable to either the patient, provider, the patient's family or the consulting provider; the TeleHealth nurse may request the consultation be stopped and rescheduled in person or TeleHealth.

4.3. Technical Failure Reporting:

a. At the time the TeleHealth nurse discovers a technology problem before a consultation begins and before the patient is in the room, s/he will complete all on-site problem solving procedures.
b. If the TeleHealth nurse cannot resolve the technical problem, s/he will call the Helpline (217)545-8600.
c. The technology problems will be worked on prior to the patient being placed in the room to ensure privacy.
d. If the patient had already been placed in the room, the TeleHealth nurse will move the camera off the patient and onto a position in the room where the TeleHealth nurse can be viewed but where all electronically transferred patient data cannot be viewed before calling the Helpline.
e. The TeleHealth nurse will then inform the patient that s/he needs to involve technical staff to determine the source of the problem. The patient will be given

the option of waiting in the exam room or in the waiting area.

f. The Helpline will follow internal procedures for identifying the source of the problem and getting the right technician for solving the problem as quickly as possible.
g. The Helpline technician will call the TeleHealth nurse to inform them who the technician is and that the technician may view the patient site remotely until the technology problem is resolved.
h. The technician will resolve the problem and will inform the TeleHealth nurse through videoconferencing system that the problem is resolved.
i. The technician will announce to the TeleHealth nurse that they are dropping out of the call and will not participate unless the TeleHealth nurse calls with further problems.
j. All technology problems will be documented by the TeleHealth nurse on the TeleHealth Technology Report Form which is forwarded to the TeleHealth Director
k. All technology failures are tracked and analyzed by the Administrative team for causes to help minimize or eliminate repeat technical problems during consultations.
l. All technology failures are tracked and analyzed by the Administrative team for causes to help minimize or eliminate repeat technical problems during consultations

5. ADDITIONAL RESOURCES

5.1. Additional Questions:

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Patient Security

1. SCOPE

1.1. System Wide This procedure applies to all regional telepresenters working with SIU HealthCare providers and SIU HealthCare's partner TeleHealth organizations providing care via TeleHealth

2. DEFINITIONS & EXPLANATIONS OF TERMS

2.1. TeleHealth Nurse (THN): is the clinical presenter of the patient at the remote patient site and has a direct patient-provider relationship.

2.2. Information Systems Technician (IS): is a non-clinical staff member whose primary responsibility is to maintain the integrity of the video network, hardware and respond to Helpline calls.

2.3. Interactive TeleHealth Consult: is a real time, two-way interaction with audio and video, between a patient and consulting provider.

2.4. SIU TeleHealth runs on the proprietary IS network of dedicated bandwidth of 100Mbps.The hardware and software are all HIPAA compliant as well as the human systems responsible for operation and maintenance of the network.

3. POLICY BODY

The SIU respects and will protect every patient's right to have all information they share with health care professionals kept confidential.

Patient information, regardless of its media, i.e. written, verbal, or stored in paper, photograph, video, or electronic format may be used for a variety of legitimate purposes; for example, patient care, quality review, education, research, public health, legal, and reimbursement. Regardless of its use, patients must be assured the information they share with health care professionals will remain confidential. Without assurance, patients may withhold critical information which could affect the quality and outcome of care, as well as the reliability of the information.

3.1. Conduct

a. TeleHealth and all inclusive activities associated with TeleHealth are a part of SIU and are governed by the policies and procedures of SIU with regards to privacy, confidentiality, security, and Health Insurance Portability and Accountability Act compliance.

b. No separate policies or procedures are necessary to govern TeleHealth activities. c.

Specific procedures may apply to regulated patient populations such as those receiving substance abuse and mental health services.

d. Employees observing other employees violating patient privacy during TeleHealth consultations in collaboration with SIU HealthCare should report the

incident to their manager.

e. All alleged violations of the TeleHealth Security Policy will be investigated by managers and/or appropriate personnel.

f. Employees found in violation of this policy are subject to disciplinary actions up to and including, immediate termination.

3.2. Procedure

a. The nurse educates the patient to allow for private time with the patient and clinician if the patient so chooses.

b. The provider must announce if anyone else is in the room and ask permission. If the patient does not want anyone in the room, the provider must excuse the staff member from the consult.

c. If the patient had already been placed in the room, the TeleHealth nurse will move the camera off the patient and onto a position in the room where the TeleHealth nurse can be viewed but where all electronically transferred patient data cannot be viewed prior to calling the Helpline.

d. The TeleHealth nurse will then inform the patient that s/he needs to involve technical staff to determine the source of the problem. The patient will be given the option of waiting in the exam room, waiting area or to reschedule.

4. ADDITIONAL RESOURCES

4.1. Additional Questions:

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Framing the Patient

1. SCOPE

1.1. System Wide: This procedure applies to all regional telepresenters working with SIU HealthCare providers and SIU HealthCare's partner TeleHealth organizations providing care via TeleHealth

2. PURPOSE

2.1. To outline the process for framing the TeleHealth patient on the TeleHealth videoconference system and cameras for any TeleHealth visit in order to improve efficiencies for the patient, provider and TeleHealth nurse as well as provide an optimal view of the clinical condition.

3. DEFINITIONS & EXPLANATIONS OF TERMS

3.1. Codec: refers to the clinical video conferencing device or software. Sometimes used interchangeably with Polycom.

3.2. TeleHealth Consult: is used interchangeably with TeleHealth visit. It refers to any TeleHealth appointment.

3.3. Zoom: a function that allows for a closer view of the subject

3.4. Focal Distance: focal length is an indicator of the distance from the subject and determines how magnified or "zoomed in" the distant image is(i.e. if images of something are all framed the same a differences can arise because the focal length is getting longer (zooming in) as the camera moves further away from the subject.

3.5. Contrast: the ability to distinguish between differences in intensity of an image

3.6. Perpendicular Angle: the relationship between two lines which meet at a right angle or at 90°

3.7. Gaze Angle: the difference between where an individual is looking at the screen and the position of the camera

4. PROCEDURE BODY

To serve as a guide for setting up TeleHealth equipment, videoconference system, cameras and patient for any TeleHealth visit. The intent of this guideline is to provide direction order to improve efficiencies for the patient, provider and TeleHealth nurse and ensure transmission of the best image possible.

4.1. Telepresenter Role: A good Telepresenter is key to a successful TeleHealth program and plays a critical and active role in the exam. The effective Telepresenter will:

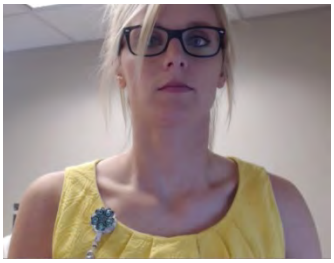
- Accurately report
  - Observations of the subject
  - Impressions about the camera's view and if the image is being transmitted accurately reflects patient condition

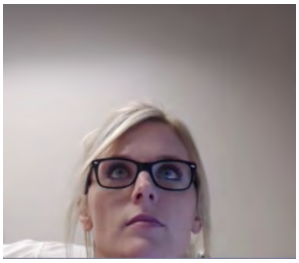
- Evaluate and properly adjust the height, angle and distance of the codec and cameras from the subject
- Appropriately adjust camera position and zoom
- Create optimal lighting conditions
- Appropriately position and reposition patient for exam
- Will be able to accurately reposition the camera
- These adjustments must occur in a fluid manner that is responsive to the examination needs and activity of the patient (i.e. identifying congenital anomalies which can be small and subtle will require optimal positioning whereas movement, tone, and reflex must occur when the subject is in a relaxed state)

4.2. Codec Image Display:

- The ideal patient image will be as close as comfortable with the head and shoulders centered. The codec permits different displays for the Telepresenter and remotely located physician as well as the same display
- When attempting to properly frame the patient's head and shoulders, start with the zoom out and with the nose of the patient in the center of the screen. Zoom in as much as possible while maintaining clarity and without "cutting off" the top of the patient's head or not having the shoulders in the image.
    - The goal of this image is to mimic as closely as possible an in person visit

- If the image is not centered or natural parts of the image are cut off on the screen, this can the distraction for the person at the remote location.





- Occasionally, having the same image displayed to the Telepresenter can allow him or her to more readily make changes that will enhance the view for the clinician.
- Poor lighting conditions, camera angles or camera focal points can result in an inability of the clinician to accurately observe abnormal skull shape, pigment differences (especially eye color), respiratory effort, eye movement abnormalities, muscle tone abnormalities, and deep tendon reflexes.

4.3. Codec Camera Placement:

- Prior to the exam:
  - It is useful to identify the minimal focal distance for the equipment's cameras by zooming in on an object in the room.
  - Identifying a location so the camera is at a minimal distance away and can allow maximal zoom while maintaining the ability to focus on features.
- The codec camera needs to be placed in a location that allows the patient to directly look at the clinician
  - If the camera is placed too close to the patient or too high above them, they will appears to be looking up rather than directly at the clinician

4.4. Lighting:

- Appropriate lighting will create images that are evenly lit and accurately reproduce colors. Poor use of lighting can cause images to have shadowing, appear to dark or cause bright spots. This type of image will not allow an accurate exam.
- Low angle lighting can be useful to distinguish skin surface characteristics
- A light source in front of the patient can reduce shadows that occur on the face if only overhead lighting is used or if there is a light source behind the patient
- Be sure to not create bright spots on patient with lighting as this can cause poor contrast quality
- Exam tables or chairs that a patient may sit in should not be placed in front of a

window. This can cause backlighting which can cause quality deterioration of patient image transmitted to the clinician

4.5. Background Color and Distraction:

- Any background distractions, such as pictures, equipment, and windows, should be as minimal as possible. Such objects in the background can create distractions for the clinician
- A solid and preferably blue background is ideal for video and image transmission.
    - A solid background will provide the least amount of distraction
    - A blue background is ideal for video and images, as this provides the most adequate and natural contrast of the image

4.5. Image Viewing and Angle Considerations: It may require multiple images from various angles to achieve an optimal and accurate exam and/or diagnoses.

- A feature that is perpendicular to the plane of view is the most accurately seen. These angles should provide the most accurate and true to life image in order for the clinician to appreciate any abnormalities or anomalies.
- The telepresenter may need to position body parts being examined, perpendicular to the camera through repositioning of the equipment and the patient
    - Move and turn the patient as needed to provide an optimal examination

4.6. Considerations for Special Populations:

- For neonatal intensive care examinations, the optimal camera angle may be directly above the isolette and angled down subject. This angle will maximized the amount of the subject perpendicular to the camera
- For congenital anomalies, viewing the subject so the feet extend away from the camera allows better visualization of skull shape, hand shape, and the top of foot to better visualize anomalies such as syndactyly or cephalic deformities
- For a neurologic exam, repositioning the patient so that the face is perpendicular to the camera can help to better detect abnormal facial or eye movement, sucking, and rooting. Making sure the patient's joint angles are perpendicular to the camera can assist in viewing spontaneous movements and reflexes

- For a more accurate examination, a neonate's hands must be held open and flat as often times, they will have hands clenched at rest.
    - Hand proportion can be distorted when it is not placed perpendicular to the camera's viewing angle.

5. ADDITIONAL RESOURCES

5.1. Additional Resources:

T L Wenger, J Gerdes, K Taub, D T Swarr, M A Deardorff and N S Abend (2014)
Telemedicine for genetic and neurologic evaluation in the neonatal intensive care unit
Journal of Perinatology **34**, 234-240 (March 2014) | doi:10.1038/jp.2013.159

5.2. Additional Questions:

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Audiology

1. SCOPE

1.1. System Wide: This procedure applies to all regional telepresenters working with SIU HealthCare providers and SIU HealthCare's partner TeleHealth organizations providing care via TeleHealth.

2. PURPOSE

2.1. To outline the process for TeleHealth patient sites to prepare the environment and the patient for a TeleAudiology visit and to outline equipment, procedures, and physical exam requirements for working with an Audiologist via TeleHealth.

3. DEFINITIONS & EXPLANATIONS OF TERMS

3.1. **Polycom**: refers to the clinical video conferencing device or software. Used interchangeably with Codec.

3.2. **Otoacoustic Emissions (OAE):** are the stimulated and non-stimulated faint sounds produced by oscillations of the outer hair cells in the cochlea that can be measured in the occluded ear canal.

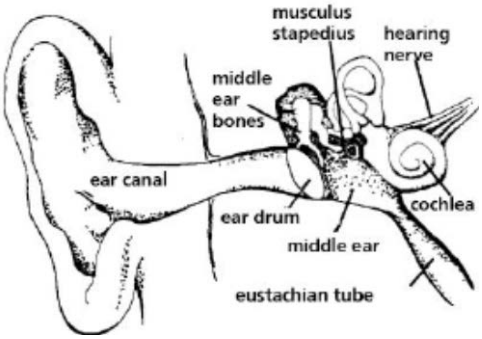
3.3. **Distorted Product Otoacoustic Emissions (DPOAEs):** are acoustic signals that can be detected in the ear canal of a person with normal outer hair cell function, subsequent to stimulation of the auditory system with a pair of pure tones at frequencies f1 and f2. The resulting emission of interest is the distortion product tone at the frequency 2f1-f2.

3.4. **Transient Evoked Otoacoustic Emissions (TEOAEs):** Transient Evoked Otoacoustic Emissions (TEOAEs) are acoustic signals that can be detected in the ear canal of a person with normal outer hair cell function, subsequent to stimulation of the auditory system with a series of wideband clicks.

3.5. **ERO SCAN:** The name ERO Scan stands for Etymotic Research Otoacoustic Emissions Scanner.

3.6. **The ERO SCAN Otoacoustic Emission test instrument:** is a hand-held device designed to provide an objective measure of outer hair cell function through the measurement of cochlear emissions. It consists of the handheld unit, single-use ear tips and other accessories. The purpose of the ERO Scan test system is to provide a rapid measurement and documentation of Distortion Product Otoacoustic Emissions (DPOAEs) or Transient Evoked Otoacoustic Emissions (TEOAEs) at several frequencies.

3.7. An otoscopic examination of the patient's ear canals should be performed prior to testing to determine ear canal size. Excessive cerumen or vernix in the ear canals may interfere with the test and give invalid or incompatible results. Patients with excessive debris



should be referred to an audiologist or physician for removal of the blockage prior to testing.

4. PROCEDURE BODY

All clinical staff responsible for the presenting of patients to Audiology Services or any provider who may need a component of audiology services shall be proficient in providing audiology data via TeleHealth technologies.

All clinical staff responsible for the presenting of patients to Audiology Services or any provider who may need a component of audiology history or physical exam shall be appropriately trained.

4.1. Audiology Referral Process:

- In order to schedule a TeleAudiology consult, follow the SIU HealthCare Appointment Process.

4.2. Pre-Consult Preparation:

- Clean and prepare exam table for patient
- Prepare technology to include : ERO SCAN and the otoscope and Polycom **one hour prior** to the TeleHealth visit.

  ☐ Make a test call at this time if system has **not been used recently or desired**

- Turn on lights appropriate to provide lighting for the TeleHealth consult
- Review and have readily available pertinent patient information for the exam
- Frame patient so audiologist can see the infant while testing is taking place.
- A quiet infant is imperative for proper testing.

4.3. Setting up for OAE Testing:

- Remove handheld ERO Scan device and eartips from case.
- Insert 4 AA batteries into ERO SCAN device. Open the battery compartment by sliding the battery panel down and install the batteries as indicated on the battery label. Once the batteries are correctly in place, slide the panel back onto its tracks to close the battery compartment.

4.4. Installing the External Probe:

- Turn off ERO SCAN Pro and insert external probe plug into the socket on the top of the ERO SCAN Pro. The plug will only fit in one direction.
- Turn on the ERO SCAN Pro. The status indicator on the external probe keypad will be solid green indicating the ERO SCAN Pro has detected the presence of the remote probe.

4.5. Perform an Otoscopic Examination of the ears:

- Have the otoscope turned on.
- Allow the Audiologist to perform an otoscopic exam.
- Select the appropriate size ear tip.
- Place an ear tip as far down as possible on the external probe tip.

4.6. Performing the OAE Test

- Turn on the ERO scan instrument by pressing the button that looks like a circle with a line in it in the upper left corner of device.
- Select the appropriate arrow to indicate right or left ear to be tested.
- Insert the ear tip deeply into the patient's ear canal to obtain a seal. You may need to pull firmly on the pinna to insert tip deep enough. When a seal is obtained, the ERO SCAN instrument will automatically begin the test first calibrating and then testing emissions. The red ERROR LED will illuminate if there is noise in the environment.
- If the scan does not start, reposition probe in ear and try again.
- Once the testing is finished, the unit will display "PASS" or "REFER" on the LCD display.
- Show results to Audiologist via TeleHealth technology. Please make sure the Audiologist can see the results. Monitor the image in picture in picture to assure proper lighting.
- Repeat steps for ear not tested.
- The test may need to be repeated several times. Audiologist will advise.
    - The ERO SCAN has an automatic shutdown feature designed to prolong battery life. The unit will automatically shutdown after 1 minute of inactivity. This may result in the user having to turn on the device several times due to infant's position and noise.

4.7. Post Testing Considerations:

- Reinforce any patient teaching.
- Assist the patient with instructions for using medications.
- Make sure the patient has a follow-up appointment if needed and a business card for the provider
- Give the patient the SIU TeleHealth Patient Satisfaction Survey and if possible, have them complete this form prior to leaving and return with the TeleHealth Technology Report Form
    - If not, please ask the patient to complete this survey and return in one of the envelopes provided by SIU TeleHealth
- Enter TeleHealth Facility Fee charge in billing system
- Fill out TeleHealth Technology Report Form (located on the SIU TeleHealth website) and return in provided business reply envelopes.

5. ADDITIONAL RESOURCES

5.1. Additional Questions:

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Cardiology

1. SCOPE

1.1. System Wide: This procedure applies to all regional telepresenters working with SIU HealthCare providers and SIU HealthCare's partner TeleHealth organizations providing care via TeleHealth.

2. PURPOSE

2.1. To outline the process for TeleHealth patient sites to prepare the environment and the patient for a TeleCardiology visit and to outline equipment, procedures, and physical exam requirements for working with a Cardiologist via TeleHealth.

3. DEFINITIONS & EXPLANATIONS OF TERMS

3.1. **Polycom**: refers to the clinical video conferencing device or software. Used interchangeably with Codec

3.2. **Xanthelasma**: are yellow lipid lesions on the eyelids associated with hyperlipidemia.

3.3. **Corneal arcus**: whitish opaque ring around junction of cornea and sclera.

3.4. **Cyanosis**: decreased oxygenation/hypoxia.

4. PROCEDURE BODY

All clinical staff responsible for the presenting of patients to Cardiology Services or any provider who may need a component of a cardiac history or physical exam shall be proficient in providing cardiac exam data via TeleHealth technologies.

All clinical staff responsible for the presenting of patients to Cardiology Services or any provider who may need a component of cardiac history or physical exam shall be appropriately trained.

4.1. Cardiology Referral Process

- In order to schedule a TeleCardiology consult, follow the SIU HealthCare Appointment Process

4.2. Pre-Consult Preparation

- Clean and prepare exam table for patient
- Turn on lights appropriate to provide lighting for patient's face and affected area(s). Obtain an exam light if necessary
- Prepare technology to include: digital still camera, otoscope, hand held camera, digital stethoscope and Polycom **one hour prior** to the TeleHealth visit.
  - **Make a test call at this time if system has not been used recently or**

desired

- Review and have readily available pertinent patient information for the exam

4.3. Patient Preparation

- When escorting patient from the waiting area to the TeleHealth room, ask patient if they brought any required forms provided by clinician office via mail prior to appointment and obtain height and weight if applicable
- Inquire as to whether or not the patient has ever "seen the doctor on a television screen for an appointment" before

- If the patient answers "**No**":
    - Explain TeleHealth
    - How it works – two way audio and video over a secure network
    - That the telepresenter will use cameras to show clear pictures of the patient's condition
    - Emphasize that this is secure and private and that no one else is able to see and hear the visit (just as if this were an in person visit)
    - That the patient has the right to request that a resident or any other person who is in the room on the provider's end to leave
    - That the telepresenter will stay in the room with the patient during the visit to run the equipment and help the provider, but that if the patient desires private time with the provider, they can request for the telepresenter to step out of the room
    - The patient should always ask the provider to repeat anything the patient did not hear or understand
- Complete vital signs. This should include: temperature, blood pressure, pulse, respirations, and height and weight. Enter results in the SIU HIPAA compliant PHI transfer system.

- Complete the SIU Cardiology Health History form

- Verify medications (include dose and frequency), update if necessary. Also verify allergies, update if necessary.

- Have the patient remove clothing, jewelry, and make-up as necessary to obtain adequate view. Offer the patient a gown if necessary

- Frame the patient

- Take pictures of the affected area(s) (of any incisions, wounds, and/or ulcers) according to the SIU Photography Protocol and upload to the SIU File Transfer system

- Complete the **"Pre-Exam Physical"** (Section 4.4)

- **Fax** any patient information **not** documented in the EHR to the provider's office staff prior to the start of the appointment

- Call the provider's office to inform them that the patient is ready and ask them the staff to check the patient in to the provider's schedule

- Wait with the patient for the provider to call on the video system.

4.4. Pre-Exam Physical

4.4.1. Pulses: assess radial, femoral and pedal pulses bilaterally: assess for strength (i.e. absent/present, equal) and/or a three point scale of:

4.4.1.1. 3+= bounding, hyperkinetic

4.4.1.2. 2+= normal

4.4.1.3. 1+= weak, thready, hypokinetic

4.4.1.4. 0 = absent

- Regularity: regular or irregular
- Equality: bilaterally are the pulses equal or not

4.4.2. Instruct the patient to sit upright at a 90-degree angle. Veins are normally flat and pulsations are not evident. Then ask the patient to lie supine with the head elevated 30-45 degrees. Hyperextension or flexion may stretch or kink the vein. Apply moderately firm pressure with the palm of your hand over the patient's right upper abdominal quadrant for 30-60 seconds. If jugular venous pressure increases, the vein will appear more prominent.

4.4.3. Assess for **Edema** (record in SIU TeleHealth PHI transfer system):

4.4.3.1. 1+= slight pitting: no visible change in the shape of the leg (skin indents 2mm)

4.4.3.2. 2+= somewhat deeper pitting; no marked change in the shape of the leg (skin indents 4mm)

4.4.3.3. 3+= pitting is deep; leg is full and swollen (skin indents 6mm)

4.4.3.4. 4+= pitting is very deep; leg is very swollen (skin indents 8mm +)

4.4.4. Color: Note the color of the skin. Is there any redness, brownish areas near the ankle, or ulcers? If edema present, how far up the leg does it go?

4.5. Assisting Provider with Physical Exam

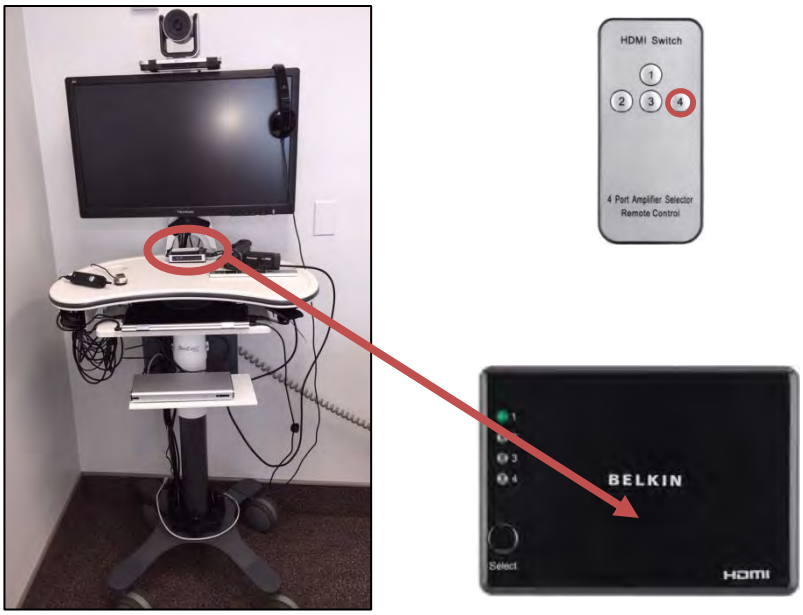
4.5.1. Be prepared to assist the provider with the physical exam. The provider will direct the nurse in the room.

- Ensure that the patient is always framed appropriately so the provider can see all aspects of the patient interaction.

- While the provider is talking to the patient and taking a history, make sure that the hand-held video camera is convenient and available for a live exam

  - When the provider asks for additional assistance with examining and viewing the patient via the hand-held video camera:

- Switch the HD input by using the “HDMI Switch” remote and selecting 4



-
- Press the camera/play button on the camera

- Narrate the location and position of the image that is being displayed i.e., ‘right hand’, ‘left lower leg’, etc.
- Slowly move the video camera over the requested areas and wait for the Cardiologist to direct the exam
- When finished with the live exam, set the camera down on the cart and return to telepresenting requirements of input 1 by pressing the 1 or 2 on the HDMI switch remote.

4.5.2. Ears and Mouth

- Using the fiber optic otoscope to view both ear canals and oral cavity, allowing the provider to assess for cyanotic mucous membrane.

4.5.3. Eyes

- Using the hand held camera or room camera to zoom in on the eyes allowing the provider to assess the eyes for xanthelasma, corneal arcus,

pale conjunctivae- associated with anemia; cyanotic conjunctivae, or petechiae on conjunctivae.

4.5.4.Lungs:

- With the patient's posterior side to the room camera, place limited pressure with the digital stethoscope at the six posterior lung fields for two complete inspirations and expirations. Begin with the upper lobes of the lung, moving the diaphragm of the stethoscope in a ladder-like pattern, from one side to the other. This will allow the provider to identify patterns of breath sounds and compare symmetric areas of the lungs. Then with the patient's anterior side facing the room camera, use the digital stethoscope to auscultate two anterior lung fields.

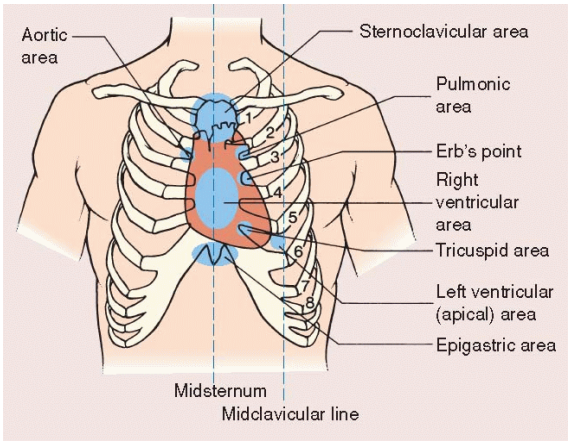
4.5.5. Heart: with the patient's anterior side to the room camera, apply limited pressure to the digital stethoscope to auscultate.

4.5.5.1.Aortic valve at the second right intercostal space at the sternal border.

4.5.5.2.Pulmonic valve at the second left intercostal space at the sternal border.

4.5.5.3.Secondary aortic at the third left intercostal space at the sternal border.

4.5.5.4.Tricuspid valve at the fifth left intercostal space at the sternal border.



4.5.5.5.Point of Maximal Impulse (PMI) is at the apex; fifth left intercostal space at the midclavicular line.

4.5.5.6. Epigastric area, tip of the sternum.

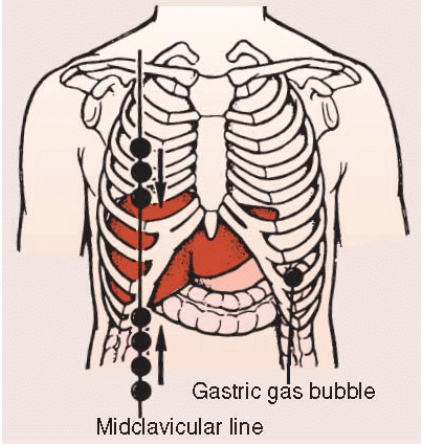
- Watch the provider for cues to move to the next landmark.
- Abdominal exam: be prepared to use the room camera and hand held camera.

4.5.6. Assessment for Aortic Aneurysms (AA): with the patient laying supine, pan room camera out to display patient lying on exam table. Press firmly and deep into the upper abdomen, slightly left of the midline, and identify the aortic pulsations. In people older than 50, try to assess the width of the aorta by pressing deeply in the upper abdomen with one hand on each side of the aorta. Report any dilation of the aorta to the provider. Normal aorta width is not more than 3cm for persons age 50 or >; average width is 2.5cm (not including the thickness of the abdominal wall).

4.5.7. Assessment for Renal Artery Stenosis: Gently place the stethoscope on the abdomen. Hold digital stethoscope lightly against the abdomen over the upper midline or toward the flank. The provider is assessing for medium to low pitched murmurs resulting from renal artery stenosis.

4.5.7.1. For the hypertensive patient, listen carefully over the center epigatrium and posterior flank for a bruit in the arterial tree. An epigastric bruit radiating laterally suggests renal artery stenosis.

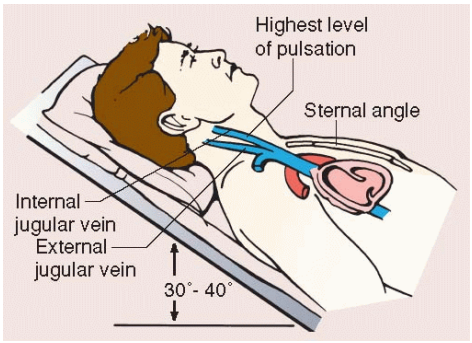
4.5.8. Assessment for Hepatomegaly: Assess the descent of the liver by asking the patient to take a deep breath in and hold it while the nurse percusses upward from the abdomen to detect the lower liver border. The liver will normally descend 2-3cm with inspiration. This maneuver can help guide placement of your hands for palpating the liver border.



4.5.8.1. The suggested ranges of normal values are 6-12cm in the midclavicular line and 4-8cm in the midsternal line A direct correlation exists between body size and liver span. Men have larger livers than women. The mean midclavicular liver span in men is 10.5cm, whereas in women it is 7cm.

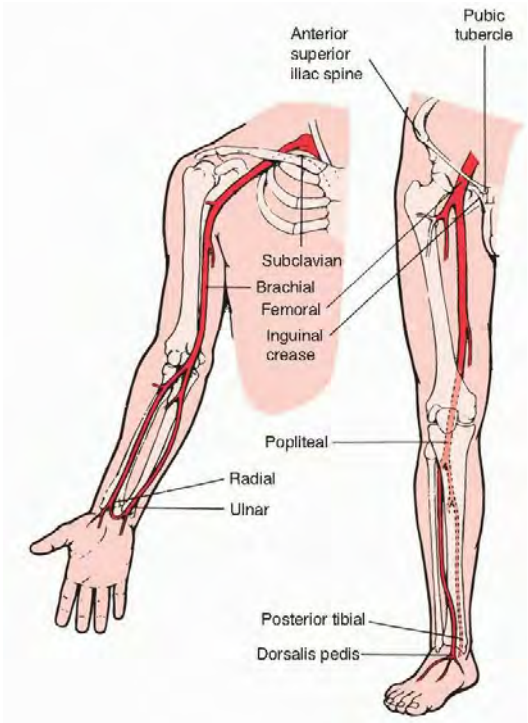
4.5.9. Assess Jugular Venous Distention (JVD).

4.5.9.1. Distention in the jugular veins reflects right arterial pressure, giving providers' important clinical indicator of cardiac function and right heart hemodynamics. JVD is evaluated best from the right internal jugular vein, because the right internal vein has a more direct anatomic channel into the right atrium. Display patient sitting and lying with the room camera. First instruct the patient to sit upright at a 90-degree angle. Veins are normally flat and pulsations are not evident. Then ask the patient to lie supine with the head slightly elevated 30-45 degrees. Hyperextension or flexion may stretch or kink the vein. Apply moderately firm pressure with the palm of hand over the patient's right upper abdominal quadrant for 30-60 seconds. If jugular venous pressure increases, the vein will appear more prominent.



4.5.10. Carotid Pulse: with the patient sitting at a 90-degree angle on the edge of the exam table or laying supine with the head elevated 30-degrees, place the digital stethoscope on the lower third of the neck, medial to the sternomastoid muscles, checking carotid pulses bilaterally. NEVER palpate or press both carotids at the same time; this may decrease blood flow to the brain and induce syncope. Decreased pulsations may be caused by decreased stroke volume, but may also result from local factors in the artery such as atherosclerotic narrowing or occlusion.

4.5.11. Peripheral Exam: Assessment of the peripheral vascular system requires inspection of the arms and legs for: size, swelling, symmetry, discoloration, wounds, and ulcers, palpate pulses bilaterally, and evaluate edema. Display patient on exam table with the room camera, palpate the pulses in order to assess the arterial circulation.



4.5.11.1. Palpate the radial pulses bilaterally with the pads of your fingers on the flexor surface of the wrist laterally. Partially flexing the patient's wrist may help to palpate the pulses.

4.5.11.2. Palpate the femoral pulses bilaterally by pressing deeply below the inguinal ligament and about midway between the anterior superior iliac spine and the symphysis pubis. The use of two hands, one on top of the other may facilitate palpation of the femoral pulses, especially in obese patients.

4.5.11.3. Palpate dorsalis pedis pulses bilaterally. Feel the dorsum of the foot (not the ankle) just lateral to the extensor tendon of the great toe.

Bounding radial and femoral pulses are present in aortic insufficiency; asymmetric, diminished pulses are present in arterial occlusion from atherosclerosis or embolism. Use hand held camera to zoom in on any skin discoloration, wounds, ulcers, surgical sites, and swelling to allow provider to evaluate for venous insufficiency, infection and/or thrombus.

4.6. Post Femoral Artery (Groin) Cardiac Catheterization Exam Review of Systems

4.6.1. Assess and report: Fever/Chills, Chest Pain, shortness of breath, groin pain, and edema.

4.6.2. Groin site assessment:

4.6.2.1. Palpate site and assess for pain/tenderness.

4.6.2.2. Assess Femoral artery for hematoma, ecchymosis, redness, bruit, and discharge. Note if angioseal or manual pressure was applied. This will be found in the cardiac catheterization report.

4.6.2.3. Check femoral artery pulse and pedal pulse on the side of the groin access.

- **Pulse grading:**

0=absent; 1+ = Barely Palpable; 2+ = Normal; 3+ = Enlarged; 4+ = Aneurysmal

4.7. Post Physical Exam

- Reframe the patient so the patient and provider have good positions for their closing discussion.
- Move out of the direct view of the video system.
- Once physician has ended the appointment, turn off all equipment used during exam
- Provide any pamphlets, handouts, or other materials as requested by the Cardiologist located in the SIU TeleHealth Patient Materials binder (provided by the SIU TeleHealth Clinical Coordinator)
- Assist the patient with dressing or any other needs and assist them in exiting the room

4.8. Post Consult Considerations

- Reinforce any patient teaching.
- Assist the patient with instructions for using any prescribed medications.
- Make sure the patient has a follow-up appointment if needed and a business card for the provider
- Give the patient the SIU TeleHealth Patient Satisfaction Survey and if possible, have them complete this form prior to leaving and return with the TeleHealth Technology Report Form.
    - If not, please ask the patient to complete this survey and return in one of the envelopes provided by SIU TeleHealth.
- Enter TeleHealth Facility Fee charge in billing system.
- Fill out TeleHealth Technology Report Form (located on the SIU TeleHealth website) and return in provided business reply envelopes

5. ADDITIONAL RESOURCES

5.1. References:

Bickley, L.S. and Szilagyi, P.G. (2007). *Bates' guide to physical examination and history taking* (9th ed.). Philadelphia: Lippincott Williams & Wilkins.

5.2. Additional Questions:

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SEQUENCE OF EXAM	ACTIVITY	INSTRUCTIONS TO PATIENT
EARS AND EYES	Exam bilateral ear canals with digital otoscope. Assess eyes for xanthelasma (yellow lipid lesions on the eyelids) associated with hyperlipidemia; corneal arcus (whitish opaque ring around junction of cornea and sclera) abnormal finding in young to middle-age adults with hyperlipidemia; pale conjunctivae – associated with anemia; cyanotic conjunctivae – associated with hypoxemia; petechiae on conjunctivae – associated with fat embolus or bacteria endocarditis.	Have patient sit on exam table.
NOSE	Assess for flaring nares (air hunger, dyspnea)	
MOUTH	Exam mouth using digital otoscope. Assess for cyanotic mucous membranes (decreased oxygenation / hypoxia) and pursed-lip breathing (associated with chronic lung disease).	Have patient sit on exam table, open mouth wide, tongue extended and say “ah.”
LUNGS	With the patient’s posterior side to the room camera, place limited pressure with the digital stethoscope at the six posterior lung fields for two complete inspirations and expirations. Begin with the upper lobes of the lung, moving the diaphragm of the stethoscope in a ladder-like pattern, for one side to the other. This will allow the provider to identify patterns of breath sounds and compare symmetric areas of the lungs. Then with patient’s anterior side facing the room camera, use digital stethoscope to auscultate two anterior lung fields.	Instruct patient to breathe deeply through an open mouth.
HEART	With the patient’s anterior side to the room camera and limited pressure on the digital stethoscope auscaltate: 1. Aortic valve at second right intercostals space at sternal border; 2. Pulmonic valve at second left intercostals space at sternal border; 3. Secondary aortic at third left intercostals space at sternal border; 4. Tricuspid valve at left sternal border at fifth left intercostals space; 5. PMI (Point of maximal impulse) at apex, fifth left	Instruct patient to sit on exam table with patient’s anterior side to the room camera and leaning slightly forward or lying in a supine position. Provider may request both positions. Patient

	intercostal space at mid-clavicular line; and 6. Epigastric area, tip of sternum. Watch provider for cues to move to the next landmark.	to breathe normally.
ASSESS FOR AA	With patient laying supine, zoom room camera out to display patient laying on exam table. Press firmly deep in the upper abdomen, slightly to the left of the midline, and identify the aortic pulsations. In people older than age 50, try to assess the width of the aorta by pressing deeply in the upper abdomen with one hand on each side of the aorta. Report any dilatation of the aorta to provider. Normal aorta is not more than 3.0 cm wide for persons age 50 or >; average width is 2.5 cm (not including the thickness of the abdominal wall).	Instruct the patient to lay supine.
RENAL ARTERY STENOSIS	Gently place the stethoscope on the abdomen. Hold digital stethoscope lightly against the abdomen over the upper midline or toward the flank. Provider is assessing for medium to low pitched murmurs resulting from renal arterial stenosis.**For the hypertensive client, listen carefully over the center epigastrium and posterior flank for a bruit in the arterial tree. An epigastric bruit radiating laterally suggests renal artery stenosis.	Instruct the patient to lay supine.
HEPATOMEGOLY	Assessing the descent of the liver by asking the patient to take a deep breath and hold it while nurse clinician percusses upward from the abdomen to detect the lower liver border. The liver will normally descend 2 to 3 cm with inspiration. This maneuver can help to guide placement of your hands for palpating the liver border. **The suggested ranges of normal values are 6 to 12 cm in the mid-clavicular line and 4 to 8 cm in the mid-sternal line (page 509). A direct correlation exists between body size and liver span. Men have larger livers than women. The mean mid-clavicular liver span in men is 10.5 cm, whereas it is 7 cm in women.	Instruct the patient to lay supine.
JVD (Jugular Venous Distension)	The jugular veins are inspected to assess for elevations in venous pressures, which	Instruct the patient to sit at

	can be caused by increased blood volume, the reduced capacity of the right atrium to receive blood, reduced ability of the right ventricle to contract and force blood into the pulmonary artery. Any factor resulting in greater blood volume within the venous system causes elevated venous pressure.	90-degree angle. Then ask the client to lie supine with the head elevated 30 to 45 degrees
BILATERAL PULSES	Palpate Pulse sites bilaterally and assess for strength, regularity, and equality.	Instruct the patient to lay supine.
Radial	Medial and ventral aspect of wrist	
Femoral	Below and medical to inguinal ligament, midway between anterior superior iliac spine and symphysis pubis.	
Dorsal pedal	Dorsal aspect of foot about midway between ankle and toes, with foot flexed.	

Dermatology Presenting

1. SCOPE

1.1. System Wide: This procedure applies to all regional telepresenters working with SIU HealthCare providers and SIU HealthCare's partner TeleHealth organizations providing care via TeleHealth.

2. PURPOSE

2.1. To outline the process for TeleHealth patient sites to prepare the environment and the patient for a TeleDermatology visit and to outline equipment, procedures, and physical exam requirements for working with a Dermatologist via TeleHealth.

3. DEFINITIONS & EXPLANATIONS OF TERMS

3.1. **Polycom**: refers to the clinical video conferencing device or software. Used interchangeably with Codec.

4. PROCEDURE BODY

All clinical staff responsible for presenting of patients to Dermatology Services or any provider who may need a component of dermatology physical exam shall be proficient and appropriately trained in providing dermatological exam data via TeleHealth technologies.

4.1. Dermatology Referral Process:

☐ In order to schedule a TeleDermatology consult, follow the SIU HealthCare Appointment Process.

4.2. Pre-Consult Preparation

☐ Clean and prepare exam table for patient

☐ Turn on lights appropriate to provide lighting for patient's face and affected area(s). Obtain an exam light if necessary

☐ Prepare technology to include: digital still camera, otoscope, hand held camera, digital stethoscope and Polycom **one hour prior** to the TeleHealth visit.

- ☐ Make a test call at this time if system **has not been used recently or desired**

☐ Delete all picture from the memory care in the camera if pictures are stored

☐ Review and have readily available pertinent patient information for the exam

4.3. Patient Preparation

☐ When escorting patient from the waiting area to the TeleHealth room, ask patient if they brought any required forms provided by clinician office via mail prior to appointment and obtain height and weight if applicable

☐ Inquire as to whether or not the patient has ever "seen the doctor on a television screen for an appointment" before

☐ If the patient answers "**No**":

- Explain TeleHealth
- How it works – two way audio and video over a secure network
- That the telepresenter will use cameras to show clear pictures of the patient's condition
- Emphasize that this is secure and private and that no one else is able to see and hear the visit (just as if this were an in person visit)
- That the patient has the right to request that a resident or any other person who is in the room on the provider's end to leave
- That the telepresenter will stay in the room with the patient during the visit to run the equipment and help the provider, but that if the patient desires private time with the provider, they can request for the telepresenter to step out of the room
- The patient should always ask the provider to repeat anything the patient did not hear or understand

☐ Complete vital signs. This should include: temperature, blood pressure, pulse, respirations, and height and weight. Enter results in the EHR.

☐ Complete the SIU Dermatological Health History form

☐ Verify medications (include dose and frequency), update if necessary. Also verify allergies, update if necessary.

☐ Have the patient remove clothing, jewelry, and make-up as necessary to obtain adequate view. Offer the patient a gown if necessary

☐ Frame the patient

☐ Take pictures of the affected area(s) according to the SIU Photography Protocol and upload to the SIU File Transfer system

☐ **Fax ((217)545-7438)** any patient information **not** documented in the EHR system to the provider's office staff prior to the start of the appointment

☐ Call the provider's office to inform them that the patient is ready and ask them the staff to check the patient in to the provider's schedule

☐ Wait with the patient for the provider to call on the video system.

4.4. Assisting Provider with Physical Exam

☐ Be prepared to assist the provider with the physical exam. . The provider will direct the nurse in the room.

☐ Ensure that the patient is always framed appropriately so the provider can see all aspects of the patient interaction.

☐ While the provider is talking to the patient and taking a history, make sure that

the hand-held video camera is convenient and available for a live exam

☐When the provider asks for additional assistance with examining and viewing the patient via the hand-held video camera:

- Switch the input by using the “HDMI Switch” remote and selecting 4

- Press the camera/play button on the camera

- Narrate the location and position of the image that is being displayed i.e., ‘right hand’, ‘left lower leg’, etc.
- Slowly move the video camera over the requested areas and wait for the Dermatologist to direct the exam
- When finished with the live exam, set the camera down on the cart and return to telepresenting requirements of input 1 by pressing the 1 or 2 on the HDMI switch remote.

4.5. Post Physical Exam

☐ Reframe the patient so the patient and provider have good positions for their closing discussion.

☐ Move out of the direct view of the video system.

☐ Once physician has ended the appointment, turn off all equipment used during exam

☐ Provide any pamphlets, handouts, or other materials as requested by the dermatologist located in the SIU TeleHealth Patient Materials binder (provided by the SIU TeleHealth Clinical Coordinator)

☐ Assist the patient with dressing or any other needs and assist them in exiting the room

4.6. Post Consult Considerations

☐ Reinforce any patient teaching.

☐ Assist the patient with instructions for using medications and making sure that medication schedules are filled out as needed (Allergic Dermatitis form, Atopic Dermatitis form, 5-fluorouracil/imiquimod, Acne, Methotrexate)

☐ Make sure the patient has a follow-up appointment if needed and a business card for the provider

☐ Give the patient the SIU TeleHealth Patient Satisfaction Survey and if possible, have them complete this form prior to leaving and return with the TeleHealth Technology Report Form.

- If not, please ask the patient to complete this survey and return in one of the envelopes provided by SIU TeleHealth.

☐ Enter TeleHealth Facility Fee charge in billing system.

☐ Fill out TeleHealth Technology Report Form (located on the SIU TeleHealth website) and return in provided business reply envelopes.

5. ADDITIONAL RESOURCES

5.1. Additional Questions:

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TELEHEALTH REQUIRED DERMATOLOGY EQUIPMENT & SUPPLIES

Effective: 06/01/2015

Materials necessary for SIU TeleHealth Facilities providing TeleDermatology

1. Standard equipment of a primary care outpatient facility doing small procedures. On the same tray with the surgical equipment, two inches of 2x2s, a dozen cotton tipped applicator sticks, small scissors, and mouse tooth forceps will be needed; also, optionally or available needle driver, suture scissors and extra pickups .

2. The shave biopsy tray to include:
    a. small formalin containing specimen bottles for shipment to laboratory
    b. individual use packets of petroleum jelly
    c. disposable curette (3mm, 4mm, and 5mm)
    d. #15 scalpel blades and #10, #11 and #15 scalpels with handles
    e. assorted sizes of Band-Aids
    f. roller gauzes, Coban
    g. aluminum chloride 35%
    h. DTM fungal culture medium (Accuderm, Inc/Ft. Lauderdale, FL 33309) or the ability to perform fungal cultures and KOH examinations for dermatophyte fungi
    i. alcohol prep pads
    j. culture materials for both bacterial and yeast culture
    k. Hibiclens

3. The punch biopsy tray to include:
    a. small formalin containing specimen bottles for shipment to laboratory
    b. individual use packets of petroleum jelly
    c. disposable biopsy punch (3mm,4mm,5mm and 6mm)
    d. assorted sizes of Band-Aids
    e. roller gauzes, Coban
    f. aluminum chloride 35%
    g. DTM fungal culture medium (Accuderm, Inc/Ft. Lauderdale, FL 33309) or the ability to perform fungal cultures and KOH examinations for dermatophyte fungi
    h. alcohol prep pads
    i. culture materials for both bacterial and yeast culture
    j. Hibiclens

Additional Questions:

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SIU DERMATOLOGY MEDICAL HISTORY

Please complete this form and bring to your appointment.

* *In order to provide a comprehensive examination, we ask that all patients please change into the gown that is provided at your visit and remove all makeup prior to your appointment. Thank you!*

Name: _____

Reason for your visit: _____

Physician who referred you: _____

Primary Care Physician *(if different from above):* _____

****For the Nurse to complete****

Birthdate:_____ **Heart Rate:**_____

Height:_____ **Blood Pressure:**_____

Weight:_____ **Respirations:**_____

Temperature:_____ **SaO2:**_____

List any allergy to medications, topical medications, or food, *and* what reaction you had: _____

List all prescription, herbal or over-the-counter medications you are currently taking OR bring a complete list to your appointment: _____

List all external/topical medications you have used or are currently using (ointments, creams, etc): _____

Current/previous occupation:_____ Retired: O No O Yes

Do you currently use tobacco? O No O Yes, if so: cigarettes/cigar/chew Number of years? _____

Did you use tobacco in the past? O No O Yes, if so: What type and how long? _____

Do you drink alcohol? O No O Yes, if so: How much? _____

Do you use birth control? O No O Yes, if so: What type?_____

Are you pregnant? O No O Yes O Not sure Planning? O No O Yes

Do you use sunscreen? O No O Yes

Are you frequently outdoors? O No O Yes

Do you use tanning beds or lay out in the sun? O Yes O No, never O No, but in the past I did

Have you ever had a skin cancer/melanoma? O No O Yes, if so: What type and when? _____

Has anyone in your family ever had a skin cancer? O No O Yes, explain: _____

Has anyone in your family had a melanoma? O No O Yes, explain: _____

Do you have a history of skin problems (eczema, psoriasis, etc.)? O No O Yes, if so: What kind? _____

Does anyone in your family have a history of skin problems? O No O Yes, if so: What kind? _____

PLEASE CIRCLE ANY SYMPTOMS YOU ARE CURRENTLY EXPERIENCING:

(INCLUDE: Location, quality (itching, burning, etc.), severity, how long, timing (when, how often)**)**

- o changing moles
- o sores on skin
- o itching
- o fever
- o chills
- o weight changes
- o night sweats
- o mouth or tongue sores
- o sore throat
- o runny nose
- o cough
- o wheezing
- o shortness of breath
- o nausea
- o vomiting
- o diarrhea
- o abdominal pain
- o blood in your stool
- o weakness
- o change in vision
- o worsening headaches
- o numbness or tingling
- o swollen glands
- o lumps in the neck, armpit, or groin
- o joint pain
- o joint swelling
- o irregular periods
- o excess hair growth
- o depression
- o anxiety

Please explain any circled items above: _____

_____

_____

Please list any other symptoms you are experiencing: _____

_____

_____

Please list all medical problems and surgical procedures: _____

_____

_____

I have reviewed this dermatology medical history. _____

Attending Date

I have reviewed this dermatology medical history. _____

Resident Date

PERMISSION FOR PHOTOGRAPHY

I consent to the taking of photographs of my skin lesion(s). I understand that these photographs will be a part of my medical record. They may also be used for educational purposes and professional publications. In such event, I will not be identified by name and I expect no compensation for these photographs.

I certify that I have read and fully understand the above consent.

_____ _____

PATIENT'S SIGNATURE **DATE**

Affix label here

Handbook & Policy Library

TELEHEALTH DERMATOLOGY PHOTOGRAPHY PROTOCOL

Effective: 06/01/2015

Photography Protocol

The TeleHealth nurse will optimize the best possible diagnostic interpretation environment, utilizing a digital still camera to capture a quality image; this is a vital component in assuring the optimal communication of patient clinical data to the Dermatologist for TeleHealth consults. **DO NOT USE THE MACRO SETTING**.

*****Collect images prior to making the check-in call to physician office*****

- ☐ Use blue pad as a background setting if possible.
- ☐ Stay at least 6 to 8 inches from the object to capture.
- ☐ Make sure subject of picture (nose, lesion, toe, etc.) is in the center of the camera field
- ☐ Ensure the larger part of surface is in focus, with larger field of depth.
- ☐ Find a minimum focal length for the camera; do not get inside that focal length.
- ☐ Zoom in until subject is slightly out of focus then slowly pan out just until image is back in focus.

Be sure to not cast a shadow onto subject

☐ Composition

- ☐ Always need to be perpendicular to the surface of the lesion or rash.
- ☐ If there is texture to the lesion or rash, use lighting as your friend. Use a gooseneck lamp to create shadow or use natural lighting, patient positioning, while taking picture from the side.
- ☐ Hairy surfaces can difficult to focus on.
- ☐ Take as many pictures as you need, then delete the pictures that are not clear and in focus.

☐ When presenting dermatology patients, special consideration should be given to

the type of exam needed.

- Acne patients: Dermatologist needs images of face, neck, chest, shoulders, back, and bilateral sides of the face (lift up bangs). If needed take an image with focusing on the nose. Neck images should be taken with the chin up and down and back of neck. Lateral aspects of neck if needed. Provider will need anterior, posterior, top and sides of shoulders.

- **Do not turn** handheld **camera off** after collection image(s). Place on TeleHealth cart on and ready for image sharing with physician.

- <u>To share image(s) with the Dermatologist:</u>
  - When the Dermatologist asks to view affected area, access HMDI 2 output by pressing the switch button on the HDMI box located under the television screen.
  - Verify that image is visualized.
  - Allow physician to direct the pace at which the next image is shown
  - Narrate each image when it is shown (left index finger, right lower extremity, etc.)
  - If the physician would like a different visual of the object, exit the photographs and use the handheld camera to present a live view rather than taking still images.

- <u>When finished sharing image(s)</u>
  - Return to HMDI 1 output by pressing the switch button on the HDMI box
  - Return camera to cart
  - After the exam is complete, delete the images

Additional Questions:

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Endocrinology Presenting

1. SCOPE

1.1. System Wide: This procedure applies to all regional telepresenters working with SIU HealthCare providers and SIU HealthCare's partner TeleHealth organizations providing care via TeleHealth.

2. PURPOSE

2.1. To outline the process for TeleHealth patient sites to prepare the environment and the patient for a TeleEndocrinology visit and to outline equipment, procedures, and physical exam requirements for working with an Endocrinologist via TeleHealth.

3. DEFINITIONS & EXPLANATIONS OF TERMS

3.1. **Polycom**: refers to the video conferencing system. Used interchangeably with Codec

3.2. **Pulses**: 3+= bounding, hyperkinetic, 2+= normal, 1+= weak, thready, hypokinetic, 0= absent.

3.3. **Edema assessment**: 1+= slight pitting: no visible change in the shape of the leg (skin indents 2mm), 2+= somewhat deeper pitting; no marked change in the shape of the leg (skin indents 4mm), 3+= pitting is deep; leg is full and swollen (skin indents 6mm), 4+= pitting is very deep; leg is very swollen (skin indents 8mm +).

3.4. **Thyroid lobes**: The lobes are somewhat harder to feel than the isthmus. The anterior surface of a lateral lobe is approximately the size of the distal phalanx of the thumb and feels somewhat rubbery.

4. PROCEDURE BODY

All clinical staff responsible for the presenting of patients to Endocrinology Services or any provider who may need a component of an endocrine history or physical exam shall be proficient in providing an endocrine exam via TeleHealth technologies and shall be appropriately trained.

4.1. Endocrinology Referral Process:

☐ In order to schedule a TeleEndocrinology consult, follow the SIU HealthCare Appointment Process.

4.2. Pre-Consult Preparation

a. Clean and prepare exam table for patient
b. Turn on lights appropriate to provide lighting for patient's face and affected area(s). Obtain an exam light if necessary
c. Prepare technology to include: digital still camera, otoscope, hand held camera, digital stethoscope and Polycom **one hour prior** to the TeleHealth visit.
   - **Make a test call at this time if system has not been used recently or desired**
d. Review and have readily available pertinent patient information for the exam

4.3. Patient Preparation

- When escorting patient from the waiting area to the TeleHealth room, ask patient if they brought any required forms provided by clinician office via mail prior to appointment and obtain height and weight if applicable.

- Inquire as to whether or not the patient has ever "seen the doctor on a television screen for an appointment" before

- If the patient answers "**No**":
    - Explain TeleHealth
    - How it works – two way audio and video over a secure network
    - That the telepresenter will use cameras to show clear pictures of the patient's condition
    - Emphasize that this is secure and private and that no one else is able to see and hear the visit (just as if this were an in person visit)
    - That the patient has the right to request that a resident or any other person who is in the room on the provider's end to leave
    - That the telepresenter will stay in the room with the patient during the visit to run the equipment and help the provider, but that if the patient desires private time with the provider, they can request for the telepresenter to step out of the room
    - The patient should always ask the provider to repeat anything the patient did not hear or understand

- Complete vital signs. This should include: temperature, blood pressure, pulse, respirations, and height and weight. Enter results in the EHR

- Complete the SIU Endocrinology Personal/Family Health History form

- Verify medications (include dose and frequency), update if necessary. Also verify allergies, update if necessary.

- Have the patient remove clothing, jewelry, and make-up as necessary to obtain adequate view. Offer the patient a gown if necessary

- Frame the patient

- Take pictures of the affected area(s) (of any incisions, wounds, and/or ulcers) according to the SIU Photography Protocol and upload to the SIU File Transfer system

- Complete the **"Pre-Exam Physical"** (Section 4.4)

- If applicable, have patient sign an Advance Beneficiary Notice of Non-coverage (ABN), fax to provider office, **AND** mail original.

- **Fax ((217)545-9125)**any patient information **not** documented in the EHR (health history forms, questionnaires, etc.) to the provider's office staff prior to the start of the appointment

- Call the provider's office to inform them that the patient is ready and ask them the staff to check the patient in to the provider's schedule

- Wait with the patient for the provider to call on the video system.

4.4. Pre-assessment physical exam for Diabetic Patients

a. **Step 1:** Download meter or pump information using Carelink Pro or Smart Pix system.
   - If this cannot be done, ask patient if they have a blood sugar log. Provide this form to patients who do not have one (located in the SIU TeleHealth Patient Materials binder)

b. **Step 2:** Check for any recent lab results for hemoglobin A1C, fasting blood sugars, and urinalysis.

c. **Step 3:** Perform Diabetic Foot exam according to SIU HealthCare standard procedure. Please use the form provided in the SIU TeleHealth Patient Materials binder.

d. **Step 4:** Fax the results of **Steps 1-3** to the provider seeing the patient.

e. **Step 5:** Perform a pulse assessment: assess radial, femoral and pedal pulses bilaterally

Strength (absent [0], present [1-3+],

equal). Regularity: regular or irregular.

Equality: bilaterally are the pulses equal or

not.

f. **Step 6:** Perform an edema assessment:

How far up the leg does it go? Note the

severity of edema (1-4+) pitting.

g. **Step 7:** Perform a skin assessment:

Note the color of the skin. Is there any redness, brownish areas near the ankle, or ulcers?

Take digital pictures of any incisions, wounds, and/or ulcers prior to the start of the consultation. Be prepared to show the images and conduct a live exam with the hand held camera as needed.

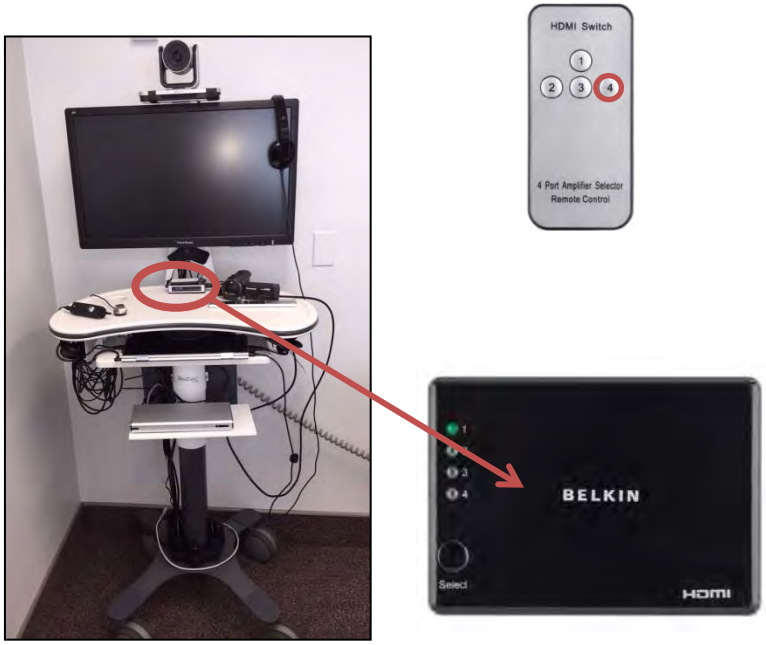
h. **Step 8:** Provide the results of the foot exam, pulses, and edema to the provider or his or her nurse.

4.5. Assisting Provider with Physical Exam:

- Be prepared to assist the provider with the physical exam. The provider will direct the nurse in the room.

- Ensure that the patient is always framed appropriately so the provider can see all aspects of the patient interaction.

- While the provider is talking to the patient and taking a history, make sure that the hand-held video camera is convenient and available for a live exam
  - When the provider asks for additional assistance with examining and viewing the patient via the hand-held video camera:
    - Switch the input by using the “HDMI Switch” remote and selecting 4



- Press the camera/play button on the camera

- Narrate the location and position of the image that is being displayed i.e., ‘right hand’, ‘left lower leg’, etc.
- Slowly move the video camera over the requested areas allowing the provider to examine the patient’s feet for: previous ulcerations or amputations, foot deformities, peripheral vascular disease, elevated plantar pressures, presence of edema, and poor nutritional status. Wait for the Endocrinologist to direct the exam
- When finished with the live exam, set the camera down on the cart and return to telepresenting requirements of input 1 by pressing the 1 or 2 on the HDMI switch remote.

4.4. Thyroid Exam:

a. **Step 1:** With the hand held camera or room camera, assist the provider to inspect the neck for the thyroid gland.
b. **Step 2:** Instruct the patient to tip their head back in a sniffing position.
c. **Step 3:** Direct peripheral lighting with goose neck lamp downward from the tip of the patient's chin to allow the provider to inspect the region below the cricoid cartilage (located just below the thyroid cartilage [Adam's apple]). The thyroid is located just below the cricoid cartilage. The lower border of the large thyroid gland will be outlined with peripheral lighting.
d. **Step 4:** With the patient's head tipped back, instruct the patient to sip some water.
e. **Step 5:** The provider will be watching for upward movement of the thyroid gland, noting its contour and symmetry.

4.5. If the provider requests the TeleHealth nurse palpate the thyroid:

a. **Step 1:** Stand behind the patient and ask the patient to slightly flex the neck to relax the muscles.
b. **Step 2:** Place the fingertips of both hands on either side of the trachea just below the cricoid cartilage.
c. **Step 3:** Ask the patient to sip water as before.
d. **Step 4:** Feel the thyroid isthmus rise up under the finger pads. Please note it is often not palpable.

e. **Step 5:** Displace the trachea to the right with the fingers of the left hand; with the right- hand fingers, palpate laterally for the right lobe of the thyroid in the space between the displaced trachea and the relaxed sternomastoid muscle. Find the lateral margin.
f. **Step 6:** In a similar fashion, follow step 5 to examine the left lobe.
g. **Step 7:** Report surface (lumpy or hard), enlargement (right > left), consistency of the gland, along with any nodules or tenderness.

4.6. Post physical exam:

- Reframe the patient so the patient and provider have good positions for their closing discussion.
- Move out of the direct view of the video system.
- Once physician has ended the appointment, turn off all equipment used during exam
- Provide any pamphlets, handouts, or other materials as requested by the

Endocrinologist located in the SIU TeleHealth Patient Materials binder (provided by the SIU TeleHealth Clinical Coordinator)

- Assist the patient with dressing or any other needs and assist them in exiting the room

4.7. Post Consult Considerations:

a. Reinforce any patient teaching.

b. Assist patient with instructions for using medications as needed.

c. Make sure the patient has a follow-up appointment if needed and a business card for the provider

d. Give the patient the SIU TeleHealth Patient Satisfaction Survey and if possible, have them complete this form prior to leaving and return with the TeleHealth Technology Report Form.
   - If not, please ask the patient to complete this survey and return in one of the envelopes provided by SIU TeleHealth.

e. Enter Facility Fee Charge in billing system.

f. Fill out TeleHealth Technology Report Form (located on the SIU TeleHealth website) and return in provided business reply envelopes.

5. ADDITIONAL RESOURCES

5.1. References:

Bickley L. S., Szilagvi P.G.(2007). *Bates' pocket guide to physical examination and history taking* (9th ed.). Philadelphia: Lippincott Williams & Wilkins.

Nettina, S. M. (2010). Lippincott manual of nursing practice (9th ed.). Philadelphia: Lippincott Williams & Wilkins.

5.2. Additional Questions:

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TeleHealth Clinical Coordinator, SIU HealthCare

Patient name			
MHN	DOB	Age	Gender

Comprehensive

Diabetic Foot Exam Note

Existing Diagnosis	Yes-Alert	No
Diabetic neuropathy	☐	☐
Peripheral vascular disease	☐	☐

Current History	Yes-Alert	No
Any **change** in feet since last evaluation	☐	☐
Current ulcer or **history of ulcer**	☐	☐
Is there **pain** in the calf muscles when walking that is relieved by rest	☐	☐

Visual Inspection	Yes-Alert	No
Skin reddened, pale, blue, shiny, loss of hair	☐	☐
Skin cracked between toes	☐	☐
Foot **deformity**	☐	☐
Any **toes** crooked, crossed, or curled under	☐	☐
Any **toenails** thick, long, ingrown or yellow	☐	☐
Any **numbness, tingling** or **burning** in feet	☐	☐
Swollen ankles or feet	☐	☐
Open sores on feet or toes	☐	☐
Blood or discharge present on **socks** or hose	☐	☐
Ill fitting or unsuitable **foot wear**	☐	☐

Pedal Pulses

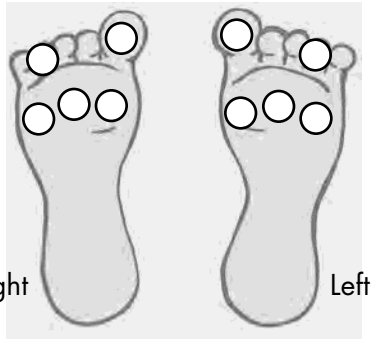
Indicate if pulses are **present** with (+), or **absent** with (–) below:

	Right	Left
Dorsalis pedis		
Posterior tibial		

Examination

Indicate if the patient **CAN** feel the monofilament with (+), or if patient **CAN NOT** feel the monofilament with (–), in the five circles on the feet diagram.

Use arrow (➔) to mark location of foot deformity (callus, ulcer)



Total number of (+) sensory sites _____ /10

Staff comments _____

_____

High-risk Patient*

For diabetes mellitus shoes, one or more of the following must be present:

- ☐ Foot deformity: Type _____ Location _____
- ☐ Pre-ulcerative callus: Location _____
- ☐ History of foot ulcer
- ☐ History of callus
- ☐ Prior amputation
- ☐ Poor circulation
- ☐ Peripheral neuropathy with callus formation
- ☐ Ulcer: Location _____

Referral Options (for high-risk patients)

Referral options:

- ☐ Orthopedics ☐ Podiatry
- ☐ Prescription shoes or orthotics: Complete form called Orthotics/Prosthetics Physician Statement and submit with prescription
- ☐ Vascular surgery evaluation
- ☐ Wound clinic/surgical intervention
- ☐ Prevent weight bearing/remove shoes

Low-risk Patient

All of the following:

- ☐ Intact protective sensation with monofilament testing 10/10 or _____ /_____
- ☐ Pedal pulses present
- ☐ No deformity
- ☐ No prior foot ulcer
- ☐ No amputation
- ☐ No prior callus

* All high risk patients need optimized glycemic control, patient education regarding foot care, and accelerate PreServ to increase monitoring of feet every 3 – 6 months.

I certify that all of the preceding checked items are true.

Provider signature/title | Service date (m/d/y) | Event provider name (print)

DIABETES SIU
Self-Management Education & Support

PARTICIPANT SELF-ASSESSMENT OF DIABETES MANAGEMENT

Name: _____ Date: _____

Date of Birth: _____ Gender: □ female □male

Ethnic Background: □ White/Caucasian □ Black/African American □ Hispanic
□ Native American □ Middle Eastern

What is your language preference? English □ Other □ _____

Mailing Address: _____

Phone: Home ( ) _____ Work ( ) _____ Cell ( ) _____

What type of diabetes do you have? □ Type 1 □ Type 2 □ Pre-diabetes □ Don't know

Year/Age of Diabetes Diagnosis: _____/_____ Relatives with diabetes? _____

Do you take diabetes medications? □ No □ Yes
If yes, please list all diabetes medications including insulin: _____

_____

About how often do you miss taking your diabetes medication as prescribed? _____

Please attach a list of any other medications that you take. *If you are a current SIU patient, then disregard.*

Do you have other health problems? *Please check.*

High blood pressure □	Heart problems □	
Nerve pain/numbness □	High cholesterol □	Thyroid problems □
Stomach/bowel problems □	Eye problems □	

What is the last grade of school that you completed? _____

Are you currently employed? _____ What is your occupation? _____

Marital status: _____ How many people live in your household? _____

From whom do you get support from your diabetes? □ No one □ Family _____
□ Co-workers □ Healthcare providers □ Support group

Do you have a meal plan for diabetes? □ Yes □ No If yes, describe: _____

How often do you use this meal plan? *Circle one.* Never Seldom Sometimes Usually Always
Do you read and use food labels as a dietary guide? _____
Do you have any diet restrictions? _____

Provide a typical day's menu in the space below. (Completing this section saves time in your appointment)

Eating Time	Foods/Beverages Consumed
For example: *6:30 am*	*Rice Krispy's/2% milk/ banana/coffee with cream*

Do you:

Do your own food shopping? Yes □ No □ If no, who does? _____
Cook your own meals? Yes □ No □ If no, who does? _____
Eat meals outside your home? Yes □ No □ If yes, how often? _____X/wk
Drink alcohol? Yes □ No □ If yes, how many _____per day/week/month. (circle one)

Do you use tobacco? No □ Yes □
Cigarette □ Pipe □ Cigar □ Chewing □ Quit □ How long ago? _____

How often do you exercise? Never □ Yes □ How often: _____

Circle any of the following tests/procedures you have had in the last 12 months:

Dilated eye exam Urine test for protein Foot exam: self ___ healthcare professional ____

Dental exam Blood pressure Weight Cholesterol Hemoglobin A1C Flu shot Pneumonia shot

Do you check your blood sugars? Yes □ No □ Blood sugar range: _____ to _____

How often and when? *Circle answers*

Once a day 2 or more times/day 1 or more/week Occasionally

Before breakfast 2 hours after meals Before bedtime

In the last month, how often have you had a low blood sugar ? Never □ Once □ More □

What are your symptoms? _____
How do you treat a low blood sugar? _____
What is your target blood sugar range? _____

Can you tell when your blood sugar is too high? Yes □ No □

What do you do when your blood sugar is high? _____

Have you had previous education on how to take care of your diabetes? Yes □ No □

How long ago? _____

In your own words, what is diabetes? _____

How do you learn best? *Circle your answer* Listening Reading Observing Doing

Do you have difficulty with: Hearing □ Reading □ Seeing □ Speaking □

Explain any checked item: _____

Do you have any cultural/religious practices/beliefs that influence how you care for your diabetes? Y □ N □

Please describe: _____

Do you use a computer to: Email □ Look for health/other information □

Please state your feelings about the following statements.

Statement	Agree	Neutral	Disagree
I feel good about my general health.			
My diabetes interferes with other aspects of my life.			
My level of stress is high.			
I have some control over whether I get diabetes complications or not.			
I struggle with making changes in my life to care for my diabetes.			
I feel motivated to make changes in my life to care for my diabetes.			

How do you handle stress? _____

_____

What concerns you most about your diabetes? _____

_____

What is hardest for you in caring for your diabetes? _____

_____

What are you most interested in learning from this/these diabetes education session(s)? _____

_____

Date: _____ **Your Signature:** _____

For office use only

Clinician Assessment Summary

Education Needs/Education Plan:

Topic	√	Topic	√
Diabetes disease process		Nutrition management	
Physical activity		Medication use	
Monitoring blood glucose		Acute complication prevention	
Chronic complication prevention		Behavior change strategies	
Risk reduction strategies		Psychosocial adjustment	
Meal planning		Other:	

Date: _____ **Clinician Signature:** _____

Date: _____ **Clinician Signature:** _____

Date: _____ **Clinician Signature:** _____

Nutrition Services

1. SCOPE

1.1. System Wide: This procedure applies to all regional telepresenters working with SIU HealthCare providers and SIU HealthCare's partner TeleHealth organizations providing care via TeleHealth.

2. PURPOSE

2.1. To outline the process for TeleHealth patient sites to prepare the environment and the patient for a TeleNutrition visit and to outline equipment, procedures, and physical exam requirements for working with a Nutritionist via TeleHealth.

3. DEFINITIONS & EXPLANATIONS OF TERMS

3.1. **Polycom**: refers to the video conferencing system. Used interchangeably with Codec.

3.2. Krames: refers to patient education material.

3.3. BMI: refers to body mass index.

4. PROCEDURE BODY

All clinical staff responsible for presenting of patients to Nutrition Services or any provider who may need a component of Nutrition Services history shall be proficient in providing nutrition services data via TeleHealth technologies and shall be appropriately trained.

4.1. Nutrition Referral Process:

☐ In order to schedule a TeleNutrition consult, follow the SIU HealthCare Appointment Process.

4.2. Pre-Consult Preparation

a. Clean and prepare exam table for patient
b. Turn on lights appropriate to provide lighting for patient's face. Obtain an exam light if necessary
c. Prepare technology to include: Polycom **one hour prior** to the TeleHealth visit
   - **Make a test call at this time if system has not been used recently or desired**
d. Review and have readily available pertinent patient information for the exam

4.3. Patient Preparation

a. When escorting patient from the waiting area to the TeleHealth room, obtain height and weight if applicable

b. Inquire as to whether or not the patient has ever "seen the doctor on a television screen for an appointment" before

- If the patient answers "**No**":
    - Explain TeleHealth
    - How it works – two way audio and video over a secure network
    - That the telepresenter will use cameras to show clear pictures of the patient's condition
    - Emphasize that this is secure and private and that no one else is able to see and hear the visit (just as if this were an in person visit)
    - That the patient has the right to request that a resident or any other person who is in the room on the provider's end to leave
    - That the telepresenter will stay in the room with the patient during the visit to run the equipment and help the provider, but that if the patient desires private time with the provider, they can request for the telepresenter to step out of the room
    - The patient should always ask the provider to repeat anything the patient did not hear or understand

c. Complete vital signs. This should include: blood pressure, pulse, respirations, height and weight, and BMI. Enter results in the EHR
d. Verify medications (include dose and frequency), update if necessary. Also verify allergies, update if necessary.
e. Frame the patient
f. **Fax ((217)545-9125)** any patient information **not** documented in the EHR to the provider's office staff prior to the start of the appointment
g. Call the provider's office to inform them that the patient is ready and ask them the staff to check the patient in to the provider's schedule
h. Wait with the patient for the provider to call on the video system

4.4. Clinical Exam

a. Ensure the patient is always framed appropriately so the provider can see all aspects of the patient interaction.

b. Nutritional Services has no physical exam. The interaction is all interview-based.

4.5. Post physical exam:

a. Once the Nutritionist has ended the appointment, turn off all equipment used during exam

b. Provide any pamphlets, handouts, or other materials as requested by the Nutritionist located in the SIU TeleHealth Patient Materials binder (provided by the SIU TeleHealth Clinical Coordinator)

c. Assist the patient with dressing or any other needs and assist them in exiting the room

4.6. Post Consult Considerations:

a. Reinforce any patient teaching.

b. Assist patient with instructions for using medications as needed.

c. Make sure the patient has a follow-up appointment if needed and a business card for the provider

d. Give the patient the SIU TeleHealth Patient Satisfaction Survey and if possible, have them complete this form prior to leaving and return with the TeleHealth Technology Report Form.
- If not, please ask the patient to complete this survey and return in one of the envelopes provided by SIU TeleHealth.

e. Enter Facility Fee Charge in billing system.

f. Fill out TeleHealth Technology Report Form (located on the SIU TeleHealth website) and return in provided business reply envelopes.

5. ADDITIONAL RESOURCES

5.1. Additional Questions:

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SIU School of Medicine

Division of Endocrinology

217.545.3821

NUTRITION HISTORY

Please answer the following questions and bring this form and the attached food log to your appointment with the Dietitian.

Are you following a special meal plan, such as calorie counting, low cholesterol, low fat, high protein or low sodium, now? Yes No

If yes, please describe: _____

Did a dietitian set this up for you? Yes No

If yes, how much of the time are you able to follow your meal plan?

Rarely Sometimes Often Usually

Who usually does the cooking? _____ The food shopping? _____

How many times each week do you eat away from home? _____

Which kind of restaurant do you usually eat or carry out? Mark F for frequently; O for occasionally; N for never.

____ Fast food: hamburger, chicken, seafood, pizza, subs, tacos

____ Buffets/All-you-can-eat

____ Sit -down restaurants

____ Sweets/Dessert shops

Do you take any vitamins/minerals/herbs/any other food or nutritional supplements? _____

If yes, please list._____

Do you regularly skip meals? _____ If yes, which ones? _____

Do you have "trigger" foods that often cause you to overeat? _____

If yes, please list. _____

Have you ever on an extreme diet (such as fasting) or a fad diet? _____

If yes, please describe. _____

Do you eat for other reasons than hunger? _____

If yes, what are they? _____

On a scale of 1 (*not important*) to 5 (*very important*), how important is it for you to improve your health?

1 2 3 4 5

On a scale of 1 (*not ready*) to 5 (*very ready*), how ready are you to make lifestyle changes to improve your health?

1 2 3 4 5

On a scale of 1 (*not at all confident*) to 5 (*very confident*), how confident are you to make lifestyle changes?

1 2 3 4 5

What information from the dietitian are you interested in? *Please check any topic below or indicate a different topic.*

Meal planning		Eating out	
Eating less fat		Weight management	
Food label reading		Food record keeping	
Eating less sodium		Other:	

Please fill out the attached log writing down everything you eat and drink for three days. Choose two weekdays and one weekend day, if possible.

FOOD LOG

Date/Time	Place	Food or Drink	Amount
	Be specific. Where did you eat?	*Be specific. Instead of "chicken", tell how it was cooked.*	*Be specific.*

Hematology-Oncology Presenting

1. SCOPE

1.1. System Wide: This procedure applies to all regional telepresenters working with SIU HealthCare providers and SIU HealthCare's partner TeleHealth organizations providing care via TeleHealth.

2. PURPOSE

2.1. To outline the process for TeleHealth patient sites to prepare the environment and the patient for a TeleHematology-Oncology visit and to outline equipment, procedures, and physical exam requirements for working with an Oncologist via TeleHealth.

3. DEFINITIONS & EXPLANATIONS OF TERMS

3.1. **Polycom**: refers to the clinical video conferencing device or software. Used interchangeably with Codec.

4. PROCEDURE BODY

All clinical staff responsible for presenting of patients to Hematology-Oncology Services or any provider who may need a component of Hematology-Oncology physical exam shall be proficient and appropriately trained in providing an Oncology exam data via TeleHealth technologies.

****ONCOLOGY PATIENTS ARE FREQUENTLY IMMUNOCOMPRIMISED****
****PAY SPECIAL ATTENTION TO HAND HYGENE, WAITING AREAS ARE SHARED WITH CHILDREN, DURING COLD AND FLU SEASON, ETC.****

4.1. Hematology-Oncology Referral Process:

☐ In order to schedule a TeleHematology-Oncology consult, follow the SIU HealthCare Appointment Process.

4.2. Pre-Consult Preparation

☐ Clean and prepare exam table for patient

☐ Turn on lights appropriate to provide lighting for patient's face and affected area(s). Obtain an exam light if necessary

☐ Prepare technology to include: digital still camera, otoscope, hand held camera, digital stethoscope and Polycom **one hour prior** to the TeleHealth visit.

☐ Make a test call at this time if system has **not been used recently or desired**

☐ Delete all picture from the memory care in the camera if pictures are stored

☐Review and have readily available pertinent patient information for the exam

4.3. Patient Preparation

☐When escorting patient from the waiting area to the TeleHealth room, ask patient if they brought any required forms provided by clinician office via mail prior to appointment and obtain height and weight if applicable

☐Inquire as to whether or not the patient has ever "seen the doctor on a television screen for an appointment" before

☐If the patient answers **"No"**:

- Explain TeleHealth
- How it works – two way audio and video over a secure network
- That the telepresenter will use cameras to show clear pictures of the patient's condition
- Emphasize that this is secure and private and that no one else is able to see and hear the visit (just as if this were an in person visit)
- That the patient has the right to request that a resident or any other person who is in the room on the provider's end to leave
- That the telepresenter will stay in the room with the patient during the visit to run the equipment and help the provider, but that if the patient desires private time with the provider, they can request for the telepresenter to step out of the room
- The patient should always ask the provider to repeat anything the patient did not hear or understand

☐Complete vital signs. This should include: temperature, blood pressure, pulse, respirations, and height and weight. Enter results in the EHR

☐Complete the SIU Oncology Health History form

☐Verify medications (include dose and frequency), update if necessary. Also verify allergies, update if necessary.

☐Have the patient remove clothing, jewelry, and make-up as necessary to obtain adequate view. Offer the patient a gown if necessary

☐Frame the patient

☐Take pictures of the affected area(s) according to the SIU Photography Protocol and upload to the SIU File Transfer system

☐**Fax ((217)545-1411)** any patient information **not** documented in the EHR to the provider's office staff prior to the start of the appointment

☐Call the provider's office to inform them that the patient is ready and ask them the staff to check the patient in to the provider's schedule

☐Wait with the patient for the provider to call on the video system.

4.4. Assisting Provider with Physical Exam

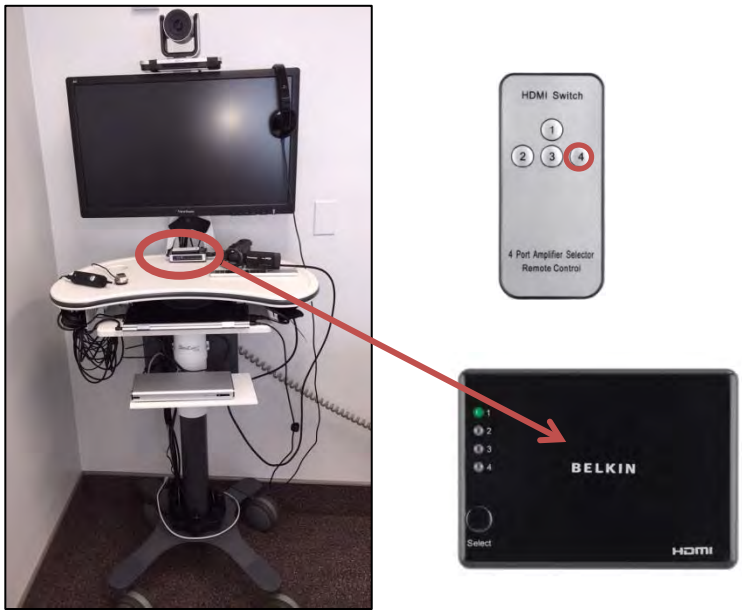
☐Be prepared to assist the provider with the physical exam. . The provider will direct the nurse in the room.

☐Ensure that the patient is always framed appropriately so the provider can see all aspects of the patient interaction.

☐While the provider is talking to the patient and taking a history, make sure that the hand-held video camera is convenient and available for a live exam

☐When the provider asks for additional assistance with examining and viewing the patient via the hand-held video camera:

- Switch the HD input by using the "HDMI Switch" remote and selecting ④



- Press the camera/play button on the camera

- Narrate the location and position of the image that is being displayed i.e., 'right hand', 'left lower leg', etc.
- Slowly move the video camera over the requested areas and wait for the Oncologist to direct the exam
- When finished with the live exam, set the camera down on the cart and return to telepresenting requirements of input 1 by pressing the 1 or 2 on the HDMI switch remote.

4.5. Post Physical Exam

☐ Reframe the patient so the patient and provider have good positions for their closing discussion.

☐ Move out of the direct view of the video system.

☐ Once physician has ended the appointment, turn off all equipment used during exam

☐ Provide any pamphlets, handouts, or other materials as requested by the Oncologist located in the SIU TeleHealth Patient Materials binder (provided by the SIU TeleHealth Clinical Coordinator)

☐ Assist the patient with dressing or any other needs and assist them in exiting the room

4.6. Post Consult Considerations

☐ Reinforce any patient teaching.

☐ Assist the patient with instructions for using medications and making sure that medication schedules are filled out as

☐ If applicable, have patient sign chemotherapy consent form and provide with instructions for after chemotherapy.

☐ Make sure the patient has a follow-up appointment if needed and a business card for the provider

☐ Give the patient the SIU TeleHealth Patient Satisfaction Survey and if possible, have them complete this form prior to leaving and return with the TeleHealth Technology Report Form.

- If not, please ask the patient to complete this survey and return in one of the envelopes provided by SIU TeleHealth.

☐ Enter TeleHealth Facility Fee charge in billing system.

☐ Fill out TeleHealth Technology Report Form (located on the SIU TeleHealth website) and return in provided business reply envelopes.

5. ADDITIONAL RESOURCES

5.1. Additional Questions:

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TeleHealth Clinical Coordinator, SIU HealthCare

Infectious Disease (ID) Presenting

1. SCOPE

1.1. System Wide: This procedure applies to all regional telepresenters working with SIU HealthCare providers and SIU HealthCare's partner TeleHealth organizations providing care via TeleHealth.

2. PURPOSE

2.1. To outline the process for TeleHealth patient sites to prepare the environment and the patient for a TeleInfectious Disease visit and to outline equipment, procedures, and physical exam requirements for working with an infectious disease specialist via TeleHealth.

3. DEFINITIONS & EXPLANATIONS OF TERMS

3.1. **Polycom**: refers to the clinical video conferencing device or software. Used interchangeably with Codec.

3.2. **Contact Precautions:** precautions intended to prevent transmission of infectious agents, which are spread by direct or indirect contact with the patient or the patient's environment. Contact Precautions also apply where the presence of excessive wound drainage, fecal incontinence, or other discharges from the body suggest an increased potential for extensive environmental contamination and risk of transmission.

3.2.1. **Direct Contact Transmission:** occurs when microorganisms are transferred from one infected person to another person without a contaminated intermediate object or person

3.2.2. **Indirect Contact Transmission:** involves the transfer of an infectious agent through a contaminated intermediate object or person

3.3. **Droplet Precautions:** precautions intended to prevent transmission of pathogens spread through close respiratory or mucous membrane contact with respiratory secretions. Respiratory droplets are generated when an infected person coughs, sneezes, or talks

3.4. **Airborne Precautions:** precautions intended to prevent transmission of infectious agents that remain infectious over long distances when suspended in the air. Preventing the spread of pathogens that are transmitted by the airborne route requires the use of special air handling and ventilation systems (e.g., AIIRs, PAPRS, N95) to contain and then safely remove the infectious agent

3.5. Personal Protective Equipment (PPE): equipment worn to minimize exposure to serious workplace injuries and illnesses. PPE may include items such as gloves, safety glasses and shoes, earplugs or muffs, hard hats, respirators, or coveralls, vests and full body suits

4. PROCEDURE BODY

All clinical staff responsible for presenting of patients to Infectious Disease Services or any provider who may need a component of infectious disease physical exam shall be proficient and appropriately trained in providing infectious disease exam data via TeleHealth technologies.

4.1. Infectious Disease Referral Process:

- In order to schedule a TeleInfectious Disease consult, follow the SIU HealthCare Appointment Process.

4.2. Pre-Consult Preparation

- BE AWARE OF PATIENT'S PAST MEDICAL HISTORY
  - Specifically know:
    - **Diagnoses**: This is critical to properly protecting not only the Telepresenter but the patient and the public
    - **HIV/AIDS Status**: HIV patients are immunocompromised. Individuals with HIV/AIDS are at a higher risk for influenza-related complications. Healthcare workers should follow universal precautions.
    - **Organ Transplant History**: Transplant patients can be at a higher risk for infections due to immunosuppressant drugs. These drugs are used to help prevent the immune system from rejecting the organ; however, this also weakens their response to fight infections.
    - **Cancer/Chemotherapy**: Patients receiving chemotherapy are at a higher risk for infections due to decreased WBC levels. Chemotherapy attacks rapidly growing cells which includes cells in blood and bone marrow. When a patient becomes leukopenic, neutropenic or pancytopenic their body is more susceptible to infections.
    - **Corticosteroids**: Patients on high doses of corticosteroids are at a higher risk for infections due to the immunosuppressive effects of these drugs. Corticosteroids are typically used to reduce inflammation (an immune system response) and treat certain autoimmune disorders. When a patient's immune system is suppressed, they are more susceptible to infections.
    - **Antibiotic Use**: It is important that the patient take antibiotics how they are prescribed. Misuse or overuse of antibiotics can lead to harmful conditions and create things such as methicillin-resistant staphylococcus aureus (MRSA) or contribute to a patient's development of clostridium difficile (C.diff). A patient can also develop C.diff when taking antibiotics properly. The antibiotic kills both good and bad bacteria creating a breeding ground for C. diff to flourish. Both of these are easily spread and highly contagious when precautions are not properly followed.
    - **Recent Travel**: Some infectious diseases, such as hepatitis, are prevalent in certain geographical areas.

☐ Clean and prepare exam table for patient

☐ Turn on lights appropriate to provide lighting for patient's face and affected area(s). Obtain an exam light if necessary

☐ Prepare technology to include: digital still camera, otoscope, hand held camera, digital stethoscope and Polycom **one hour prior** to the TeleHealth visit.

☐ Make a test call at this time if system has **not been used recently or desired**

☐ Delete all picture from the memory care in the camera if pictures are stored

☐ Review and have readily available pertinent patient information for the exam

4.3. Patient Preparation

*****It is important for the telepresenter to know patient diagnoses or possible diagnoses and the proper precautions for each*****

☐ When escorting patient from the waiting area to the TeleHealth room, ask patient if they brought any required forms provided by clinician office via mail prior to appointment and obtain height and weight if applicable

☐ Inquire as to whether or not the patient has ever "seen the doctor on a television screen for an appointment" before

☐ If the patient answers **"No"**:

- Explain TeleHealth
- How it works – two way audio and video over a secure network
- That the telepresenter will use cameras to show clear pictures of the patient's condition
- Emphasize that this is secure and private and that no one else is able to see and hear the visit (just as if this were an in person visit)
- That the patient has the right to request that a resident or any other person who is in the room on the provider's end to leave
- That the telepresenter will stay in the room with the patient during the visit to run the equipment and help the provider, but that if the patient desires private time with the provider, they can request for the telepresenter to step out of the room
- The patient should always ask the provider to repeat anything the patient did not hear or understand

☐ Complete vital signs. This should include: temperature **(particularly, note any recent history of fevers or hypothermia AND relay to clinician)**, blood pressure, pulse, respirations, and height and weight. Enter results in the EHR.

☐ Complete the SIU Infectious Disease Health History form

☐ Verify medications (include dose and frequency), update if necessary. Also verify allergies, update if necessary.

- Have the patient remove clothing, jewelry, and make-up as necessary to obtain adequate view. Offer the patient a gown if necessary

- Frame the patient

- Take pictures of the affected area(s) according to the SIU Photography Protocol and upload to the SIU File Transfer system

- **Fax (Adult:(217)545-9125, Pediatrics (217)545-5018)**any patient information **not** documented in the EHR to the provider's office staff prior to the start of the appointment

- Call the provider's office to inform them that the patient is ready and ask them the staff to check the patient in to the provider's schedule

- Wait with the patient for the provider to call on the video system.

4.4. Assisting Provider with Physical Exam

- Be prepared to assist the provider with the physical exam. . The provider will direct the nurse in the room.

- Ensure that the patient is always framed appropriately so the provider can see all aspects of the patient interaction.

- While the provider is talking to the patient and taking a history, make sure that the hand-held video camera is convenient and available for a live exam

- When the provider asks for additional assistance with examining and viewing the patient via the hand-held video camera:
  - Switch the HD input by using the "HDMI Switch" remote and selecting ④

- Press the camera/play button on the camera

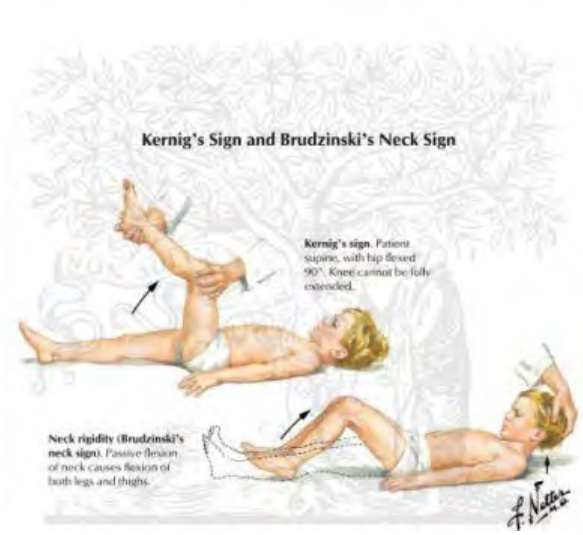
- Narrate the location and position of the image that is being displayed i.e., 'right hand', 'left lower leg', etc.
- Slowly move the video camera over the requested areas and wait for the clinician to direct the exam
- When finished with the live exam, set the camera down on the cart and return to telepresenting requirements of input 1 by pressing the 1 or 2 on the HDMI switch remote.

4.4.1. Medical History

- Be prepared to:
  - Complete skin examination, including areas covered by casts or other devices
    - Look for characteristic rashes that may provide a clue for a diagnosis (e.g., purpura fulminans in meningococcemia). Livedo reticularis is an early sign of inadequate circulation and may suggest sepsis. The presence of palpable subcutaneous gas suggests soft tissue infection

  - Examination of all implanted port sites for erythema, tenderness, and fluctuance
    - Implanted port-related blood stream infections should be considered an important source for the development of sepsis in patients with intravenous catheters.
  - Head and neck exam
    - Look for possible causes of sepsis, including sinusitis, otitis, and meningitis

- Early signs of meningitis include fever, headache, stiff neck, positive brudzinski (when supine, hips and knees will flex when neck is flexed with chin to chest) sign or kerning's sign (when supine, leg is unable to straighten when hip is flexed due to stiffness of hamstrings)



- Cardiac exam for murmur or rub
  - This may suggest endocarditis or pericarditis, respectively
- Lung exam for focal or diffuse findings
- Abdominal exam for tenderness, absent or abnormal bowel sounds
  - Careful abdominal exam is important to evaluate for a possible intra- abdominal source.
- Neurologic exam for altered mental status
  - Indicative of systemic inflammatory response and in the presence of documented or suspected infection suggests the presence of sepsis. Alternatively may be a sign of meningitis or encephalitis

4.5. Post Physical Exam

☐Reframe the patient so the patient and provider have good positions for their closing discussion.

☐Move out of the direct view of the video system.

☐Once physician has ended the appointment, turn off all equipment used during exam

☐Provide any pamphlets, handouts, or other materials as requested by the clinician located in the SIU TeleHealth Patient Materials binder (provided by the SIU TeleHealth Clinical Coordinator)

☐Assist the patient with dressing or any other needs and assist them in exiting the room

4.6. Post Consult Considerations

☐ **Reinforce any patient teaching**.

☐ Assist the patient with instructions for using medications and making sure that medication schedules are filled out as needed

☐ Make sure the patient has a follow-up appointment if needed and a business card for the provider

☐ Give the patient the SIU TeleHealth Patient Satisfaction Survey and if possible, have them complete this form prior to leaving and return with the TeleHealth Technology Report Form.

- If not, please ask the patient to complete this survey and return in one of the envelopes provided by SIU TeleHealth.

☐ Enter TeleHealth Facility Fee charge in billing system.

☐ Fill out TeleHealth Technology Report Form (located on the SIU TeleHealth website) and return in provided business reply envelopes.

5. ADDITIONAL RESOURCES

5.1. References:

Siegel JD, Rhinehart E, Jackson M, Chiarello L, and the Healthcare Infection Control Practices Advisory Committee, 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings

American College of Physicians. 2006 Internal Medicine Essentials for Students Philadelphia, PA 19106-1572
https://www.acponline.org/acp_press/essentials/cdim_ch50_wed02.pdf

5.2. Additional Questions:

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[1] Type of Precautions: A, Airborne Precautions; C, Contact; D, Droplet; S, Standard; when A, C, and D are specified, also use S.

† Duration of precautions: CN, until off antimicrobial treatment and culture-negative; DI, duration of illness (with wound lesions, DI means until wounds stop draining); DE, until environment completely decontaminated; U, until time specified in hours (hrs) after initiation of effective therapy; Unknown: criteria for establishing eradication of pathogen has not been determined

APPENDIX A[1]

TYPE AND DURATION OF PRECAUTIONS RECOMMENDED FOR SELECTED INFECTIONS AND CONDITIONS

I	P		
	Type *	**Duration †**	**Comments**
Abscess			
Draining, major	C	DI	No dressing or containment of drainage; until drainage stops or can be contained by dressing
Draining, minor or limited	S		Dressing covers and contains drainage
Acquired human immunodeficiency syndrome	S		Post-exposure chemoprophylaxis for some blood exposures [866].
Actinomycosis	S		Not transmitted from person to person
Adenovirus infection (see agent-specific guidance under			
Amebiasis	S		Person to person transmission is rare. Transmission in settings for the mentally challenged and in a family group has been reported [1045].Use care when handling diapered infants and mentally challenged persons[1046].
Anthrax	S		Infected patients do not generally pose a transmission risk.
Cutaneous	S		Transmission through non-intact skin contact with draining lesions possible, therefore use Contact Precautions if large amount of uncontained drainage. Handwashing with soap and water preferable to use of waterless alcohol based antiseptics since
Pulmonary	S		Not transmitted from person to person
Environmental: aerosolizable spore-containing powder or other substance		DE	Until decontamination of environment complete [203] . Wear respirator (N95 mask or PAPRs), protective clothing; decontaminate persons with powder on them (http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5135a3.htm) **Hand hygiene:** Handwashing for 30-60 seconds with soap and water or 2% chlorhexidene gluconate after spore contact (alcohol handrubs inactive against spores [983]. **Post-exposure prophylaxis following environmental exposure**: 60 days of antimicrobials (either doxycycline, ciprofloxacin, or
Antibiotic-associated colitis (see *Clostridium difficile*)			
Arthropod-borne viral encephalitides (eastern, western, Venezuelan equine encephalomyelitis; St Louis, California encephalitis; West Nile Virus) and viral fevers (dengue, yellow fever, Colorado tick fever)	S		Not transmitted from person to person except rarely by transfusion, and for West Nile virus by organ transplant, breastmilk or transplacentally [530, 1047]. Install screens in windows and doors in endemic areas Use DEET-containing mosquito repellants and clothing to cover extremities
Ascariasis	S		Not transmitted from person to person
Aspergillosis	S		Contact Precautions and Airborne Precautions if massive soft tissue infection with copious drainage and repeated irrigations required [154].
Avian influenza (see influenza, avian below)			
Babesiosis	S		Not transmitted from person to person except rarely by transfusion,
Blastomycosis, North American, cutaneous or pulmonary	S		Not transmitted from person to person
Botulism	S		Not transmitted from person to person

Bronchiolitis (see respiratory infections in infants and young children)	C	DI	Use mask according to Standard Precautions.
Brucellosis (undulant, Malta, Mediterranean fever)	S		Not transmitted from person to person except rarely via banked spermatozoa and sexual contact [1048, 1049]. Provide antimicrobial prophylaxis following laboratory exposure [1050].
Campylobacter gastroenteritis (see gastroenteritis)			
Candidiasis, all forms including mucocutaneous	S		
Cat-scratch fever (benign inoculation lymphoreticulosis)	S		Not transmitted from person to person
Cellulitis	S		
Chancroid (soft chancre) (*H. ducreyi*)	S		Transmitted sexually from person to person
Chickenpox (see varicella)			
Chlamydia trachomatis			
Conjunctivitis	S		
Genital (lymphogranuloma venereum)	S		
Pneumonia (infants ≤ 3 mos. of age))	S		
Chlamydia pneumoniae	S		Outbreaks in institutionalized populations reported, rarely [1051, 1052]
Cholera (see gastroenteritis)			
Closed-cavity infection			
Open drain in place; limited or minor drainage	S		Contact Precautions if there is copious uncontained drainage
No drain or closed drainage system in place	S		
Clostridium			
C. botulinum	S		Not transmitted from person to person
C. difficile (see Gastroenteritis, *C. difficile)*	C	DI	
C. perfringens			
Food poisoning	S		Not transmitted from person to person
Gas gangrene	S		Transmission from person to person rare; one outbreak in a surgical setting reported [1053]. Use Contact Precautions if wound drainage is extensive
Coccidioidomycosis (valley fever)			
Draining lesions	S		Not transmitted from person to person except under extraordinary circumstances because the infectious arthroconidial form of *Coccidioides immitis* is not produced in humans [1054].
Pneumonia	S		Not transmitted from person to person except under extraordinary circumstances, (e.g., inhalation of aerosolized tissue phase endospores during necropsy, transplantation of infected lung) because the infectious arthroconidial form of *Coccidioides immitis* is not produced in humans [1054, 1055].
Colorado tick fever	S		Not transmitted from person to person
Congenital rubella	C	Until 1 yr of age	Standard Precautions if nasopharyngeal and urine cultures repeatedly neg. after 3 mos. of age
Conjunctivitis			
Acute bacterial	S		
Chlamydia	S		
Gonococcal	S		

Acute viral (acute hemorrhagic)	C	DI	Adenovirus most common; enterovirus 70 [1056], Coxsackie virus A24 [1057]) also associated with community outbreaks. Highly contagious; outbreaks in eye clinics, pediatric and neonatal settings, institutional settings reported. Eye clinics should follow Standard Precautions when handling patients with conjunctivitis. Routine use of infection control measures in the handling of instruments and equipment will prevent the occurrence of outbreaks in this and other settings. [460, 814, 1058, 1059 461, 1060]
Corona virus associated with SARS (SARS-CoV) (see severe acute respiratory syndrome)			
Coxsackie virus disease (see enteroviral infection)			
Creutzfeldt-Jakob disease CJD, vCJD	S		Use disposable instruments or special sterilization/disinfection for surfaces, objects contaminated with neural tissue if CJD or vCJD suspected and has not been R/O; No special burial procedures
Croup (see respiratory infections in infants and young children)			
Crimean-Congo Fever (see Viral Hemorrhagic Fever)	S		
Cryptococcosis	S		Not transmitted from person to person, except rarely via tissue and corneal transplant [1062, 1063]
Cryptosporidiosis (see gastroenteritis)			
Cysticercosis	S		Not transmitted from person to person
Cytomegalovirus infection, including in neonates and immunosuppressed patients	S		No additional precautions for pregnant HCWs
Decubitus ulcer (see Pressure ulcer)			
Dengue fever	S		Not transmitted from person to person
Diarrhea, acute-infective etiology suspected (see gastroenteritis)			
Diphtheria			
Cutaneous	C	CN	Until 2 cultures taken 24 hrs. apart negative
Pharyngeal	D	CN	Until 2 cultures taken 24 hrs. apart negative
Ebola virus (see viral hemorrhagic fevers)			
Echinococcosis (hydatidosis)	S		Not transmitted from person to person
Echovirus (see enteroviral infection)			
Encephalitis or encephalomyelitis (see specific etiologic agents)			
Endometritis (endomyometritis)	S		
Enterobiasis (pinworm disease, oxyuriasis)	S		
Enterococcus species (see multidrug-resistant organisms if epidemiologically significant or vancomycin resistant)			
Enterocolitis, *C. difficile* (see *C. difficile,* gastroenteritis)			
Enteroviral infections (i.e., Group A and B Coxsackie viruses and Echo viruses) (excludes polio virus)	S		Use Contact Precautions for diapered or incontinent children for duration of illness and to control institutional outbreaks
Epiglottitis, due to *Haemophilus influenzae* type b	D	U 24 hrs	See specific disease agents for epiglottitis due to other etiologies)
Epstein-Barr virus infection, including infectious mononucleosis	S		
Erythema infectiosum (also see Parvovirus B19)			
Escherichia coli gastroenteritis (see gastroenteritis)			
Food poisoning			
Botulism	S		Not transmitted from person to person

C. perfringens or welchii	S		Not transmitted from person to person
Staphylococcal	S		Not transmitted from person to person
Furunculosis, staphylococcal	S		Contact if drainage not controlled. Follow institutional policies if MRSA
Infants and young children	C	DI	
Gangrene (gas gangrene)	S		Not transmitted from person to person
Gastroenteritis	S		Use Contact Precautions for diapered or incontinent persons for the duration of illness or to control institutional outbreaks for gastroenteritis caused by all of the agents below
Adenovirus	S		Use Contact Precautions for diapered or incontinent persons for the duration of illness or to control institutional outbreaks
Campylobacter species	S		Use Contact Precautions for diapered or incontinent persons for the duration of illness or to control institutional outbreaks
Cholera *(Vibrio cholerae)*	S		Use Contact Precautions for diapered or incontinent persons for the duration of illness or to control institutional outbreaks
C. difficile	C	DI	Discontinue antibiotics if appropriate. Do not share electronic thermometers [853, 854]; ensure consistent environmental cleaning and disinfection. Hypochlorite solutions may be required for cleaning if transmission continues [847]. Handwashing with soap and water preferred because of the absence of sporicidal activity of alcohol in waterless antiseptic handrubs [983]
Cryptosporidium species	S		Use Contact Precautions for diapered or incontinent persons for the duration of illness or to control institutional outbreaks
E. coli			
Enteropathogenic O157:H7 and other shiga toxin-producing Strains	S		Use Contact Precautions for diapered or incontinent persons for the duration of illness or to control institutional outbreaks
Other species	S		Use Contact Precautions for diapered or incontinent persons for the duration of illness or to control institutional outbreaks
Giardia lamblia	S		Use Contact Precautions for diapered or incontinent persons for the duration of illness or to control institutional outbreaks
Noroviruses	S		Use Contact Precautions for diapered or incontinent persons for the duration of illness or to control institutional outbreaks. Persons who clean areas heavily contaminated with feces or vomitus may benefit from wearing masks since virus can be aerosolized from these body substances [142, 147 148]; ensure consistent environmental cleaning and disinfection with focus on restrooms even when apparently unsoiled [273, 1064]). Hypochlorite solutions may be required when there is continued transmission [290-292]. Alcohol is less active, but there is no evidence that alcohol antiseptic handrubs are not effective for hand decontamination [294]. Cohorting of affected patients to separate airspaces and toilet facilities may help interrupt transmission during outbreaks.
Rotavirus	C	DI	Ensure consistent environmental cleaning and disinfection and frequent removal of soiled diapers. Prolonged shedding may occur in both immunocompetent and immunocompromised children and the elderly [932, 933]
Salmonella species (including *S. typhi*)	S		Use Contact Precautions for diapered or incontinent persons for the duration of illness or to control institutional outbreaks
Shigella species (Bacillary dysentery)	S		Use Contact Precautions for diapered or incontinent persons for the duration of illness or to control institutional outbreaks
Vibrio parahaemolyticus	S		Use Contact Precautions for diapered or incontinent persons for the duration of illness or to control institutional outbreaks
Viral (if not covered elsewhere)	S		Use Contact Precautions for diapered or incontinent persons for the duration of illness or to control institutional outbreaks
Yersinia enterocolitica	S		Use Contact Precautions for diapered or incontinent persons for the duration of illness or to control institutional outbreaks
German measles (see rubella; see congenital rubella)			

Giardiasis (see gastroenteritis)			
Gonococcal ophthalmia neonatorum (gonorrheal ophthalmia,	S		
Gonorrhea	S		
Granuloma inguinale (Donovanosis, granuloma venereum)	S		
Guillain-Barré' syndrome	S		Not an infectious condition
Haemophilus influenzae (see disease-specific recommendations)			
Hand, foot, and mouth disease (see enteroviral infection)			
Hansen's Disease (see Leprosy)			
Hantavirus pulmonary syndrome	S		Not transmitted from person to person
Helicobacter pylori	S		
Hepatitis, viral			
Type A	S		Provide hepatitis A vaccine post-exposure as recommended [1065]
Diapered or incontinent patients	C		Maintain Contact Precautions in infants and children <3 years of age for duration of hospitalization; for children 3-14 yrs. of age for 2 weeks after onset of symptoms; >14 yrs. of age for 1 week after onset of symptoms 833, 1066, 1067
Type B-HBsAg positive; acute or chronic	S		See specific recommendations for care of patients in hemodialysis centers [778]
Type C and other unspecified non-A, non-B	S		See specific recommendations for care of patients in hemodialysis centers [778]
Type D (seen only with hepatitis B)	S		
Type E	S		Use Contact Precautions for diapered or incontinent individuals for the duration of illness [1068]
Type G	S		
Herpangina (see enteroviral infection)			
Hookworm	S		
Herpes simplex (*Herpesvirus hominis*)			
Encephalitis	S		
Mucocutaneous, disseminated or primary, severe	C	Until lesions dry and crusted	
Mucocutaneous, recurrent (skin, oral, genital)	S		
Neonatal	C	Until lesions dry and crusted	Also, for asymptomatic, exposed infants delivered vaginally or by C- section and if mother has active infection and membranes have been ruptured for more than 4 to 6 hrs until infant surface cultures obtained at 24-36 hrs. of age negative after 48 hrs incubation [1069, 1070]
Herpes zoster (varicella-zoster) (shingles)			
Disseminated disease in any patient Localized disease in immunocompromised patient until disseminated infection ruled out	A,C	DI	Susceptible HCWs should not enter room if immune caregivers are available; no recommendation for protection of immune HCWs; no recommendation for type of protection, i.e. surgical mask or respirator; for susceptible HCWs.
Localized in patient with intact immune system with lesions that can be contained/covered	S	DI	Susceptible HCWs should not provide direct patient care when other immune caregivers are available.
Histoplasmosis	S		Not transmitted from person to person
Human immunodeficiency virus (HIV)	S		Post-exposure chemoprophylaxis for some blood exposures [866].
Human metapneumovirus	C	DI	HAI reported [1071], but route of transmission not established [823]. Assumed to be Contact transmission as for RSV since the viruses are closely related and have similar clinical manifestations and epidemiology. Wear masks according to Standard Precautions..

Impetigo	C	U 24 hrs	
Infectious mononucleosis	S		
Influenza			
Human (seasonal influenza)			See www.cdc.gov/flu/professionals/infectioncontrol/healthcaresettings.htm for current seasonal influenza guidance.
Avian (e.g., H5N1, H7, H9 strains))			See www.cdc.gov/flu/avian/professional/infect-control.htm for current
Pandemic influenza (also a human influenza virus)	D	5 days from onset of symptoms	See http://www.pandemicflu.gov for current pandemic influenza guidance.
Kawasaki syndrome	S		Not an infectious condition
Lassa fever (see viral hemorrhagic fevers)			
Legionnaires' disease	S		Not transmitted from person to person
Leprosy	S		
Leptospirosis	S		Not transmitted from person to person
Lice			http://www.cdc.gov/ncidod/dpd/parasites/lice/default.htm
Head (pediculosis)	C	U 24 hrs	
Body	S		Transmitted person to person through infested clothing. Wear gown and gloves when removing clothing; bag and wash clothes according to CDC guidance above
Pubic	S		Transmitted person to person through sexual contact
Listeriosis (listeria monocytogenes)	S		Person-to-person transmission rare; cross-transmission in neonatal settings reported [1072, 1073 1074, 1075]
Lyme disease	S		Not transmitted from person to person
Lymphocytic choriomeningitis	S		Not transmitted from person to person
Lymphogranuloma venereum	S		
Malaria	S		Not transmitted from person to person except through transfusion rarely and through a failure to follow Standard Precautions during patient care [1076-1079]. Install screens in windows and doors in endemic areas. Use DEET-containing mosquito repellants and clothing to cover extremities
Marburg virus disease (see viral hemorrhagic fevers)			
Measles (rubeola)	A	4 days after onset of rash; DI in immune compromised	Susceptible HCWs should not enter room if immune care providers are available; no recommendation for face protection for immune HCW; no recommendation for type of face protection for susceptible HCWs, i.e., mask or respirator [1027, 1028]. For exposed susceptibles, post-exposure vaccine within 72 hrs, or immune globulin within 6 days when available [17, 1032, 1034]. Place exposed susceptible patients on Airborne Precautions and exclude susceptible healthcare personnel from duty from day 5 after first exposure to day 21 after last exposure, regardless of post-exposure vaccine [17]
Melioidosis, all forms	S		Not transmitted from person to person
Meningitis			
Aseptic (nonbacterial or viral; also see enteroviral infections)	S		Contact for infants and young children
Bacterial, gram-negative enteric, in neonates	S		
Fungal	S		
Haemophilus influenzae, type b known or suspected	D	U 24 hrs	
Listeria monocytogenes (See Listeriosis)	S		
Neisseria meningitidis (meningococcal) known or suspected	D	U 24 hrs	See meningococcal disease below

Streptococcus pneumoniae	S		
M. tuberculosis	S		Concurrent, active pulmonary disease or draining cutaneous lesions may necessitate addition of Contact and/or Airborne Precautions; For children, airborne precautions until active tuberculosis ruled out in visiting family members (see tuberculosis below)[42]
Other diagnosed bacterial	S		
Meningococcal disease: sepsis, pneumonia, meningitis	D	U 24 hrs	Postexposure chemoprophylaxis for household contacts, HCWs exposed to respiratory secretions; postexposure vaccine only to control outbreaks[15, 17].
Molluscum contagiosum	S		
Monkeypox	A,C	A-Until monkeypox confirmed and smallpox excluded C-Until lesions crusted	Use See www.cdc.gov/ncidod/monkeypox for most current recommendations. Transmission in hospital settings unlikely[269]. Pre- and post-exposure smallpox vaccine recommended for exposed HCWs
Mucormycosis	S		
Multidrug-resistant organisms (MDROs), infection or colonization (e.g., MRSA, VRE, VISA/VRSA, ESBLs, resistant *S. pneumoniae*)	S/C		MDROs judged by the infection control program, based on local, state, regional, or national recommendations, to be of clinical and epidemiologic significance. Contact Precautions recommended in settings with evidence of ongoing transmission, acute care settings with increased risk for transmission or wounds that cannot be contained by dressings. See recommendations for management options in Management of Multidrug-Resistant Organisms In Healthcare Settings, 2006[870]. Contact state health department for guidance regarding new or emerging MDRO
Mumps (infectious parotitis)	D	U 9 days	After onset of swelling; susceptible HCWs should not provide care if immune caregivers are available. Note: (Recent assessment of outbreaks in healthy 18-24 year olds has indicated that salivary viral shedding occurred early in the course of illness and that 5 days of isolation after onset of parotitis may be appropriate in community settings; however the implications for healthcare personnel and high-risk patient populations remain to be clarified.)
Mycobacteria, nontuberculosis (atypical)			Not transmitted person-to-person
Pulmonary	S		
Wound	S		
Mycoplasma pneumonia	D	DI	
Necrotizing enterocolitis	S		Contact Precautions when cases clustered temporally[1080-1083]
Nocardiosis, draining lesions, or other presentations	S		Not transmitted person-to-person
Norovirus (see gastroenteritis)			
Norwalk agent gastroenteritis (see gastroenteritis)			
Orf	S		
Parainfluenza virus infection, respiratory in infants and young children	C	DI	Viral shedding may be prolonged in immunosuppressed patients[1009,1010]. Reliability of antigen testing to determine when to remove patients with prolonged hospitalizations from Contact Precautions uncertain.

Parvovirus B19 (Erythema infectiosum)	D	Maintain precautions for duration of hospitalization when chronic disease occurs in an immunocompromised patient.	
Pediculosis (lice)	C	U 24 hrs after treatment	
Pertussis (whooping cough)	D	U 5 days	Single patient room preferred. Cohorting an option. Post-exposure chemoprophylaxis for household contacts and HCWs with prolonged exposure to respiratory secretions [863]. Recommendations for Tdap vaccine in adults under
Pinworm infection (Enterobiasis)	S		
Plague *(Yersinia pestis)*			
Bubonic	S		
Pneumonic	D	U 48 hrs	Antimicrobial prophylaxis for exposed HCW [207].
Pneumonia			
Adenovirus	D, C	DI	Outbreaks in pediatric and institutional settings reported [376, 1084-1086]. In immunocompromised hosts, extend duration of Droplet and Contact. Precautions due to prolonged shedding of virus [931]
Bacterial not listed elsewhere (including gram-negative bacterial)	S		
B. cepacia in patients with CF, including respiratory tract colonization	C	Unknown	Avoid exposure to other persons with CF; private room preferred. Criteria for D/C precautions not established. See CF Foundation guideline [20]
B. cepacia in patients without CF(see Multidrug-resistant organisms)			
Chlamydia	S		
Fungal	S		
Haemophilus influenzae, type b			
Adults	S		
Infants and children	D	U 24 hrs	
Legionella spp.	S		
Meningococcal	D	U 24 hrs	See meningococcal disease above
Multidrug-resistant bacterial (see multidrug-resistant organisms)			
Mycoplasma (primary atypical pneumonia)	D	DI	
Pneumococcal pneumonia	S		Use Droplet Precautions if evidence of transmission within a patient care unit or facility [196-198, 1087]
Pneumocystis jiroveci (*Pneumocystis carinii*)	S		Avoid placement in the same room with an immunocompromised patient.
Staphylococcus aureus	S		For MRSA, see MDROs
Streptococcus, group A			
Adults	D	U 24 hrs	See streptococcal disease (group A streptococcus) below Contact precautions if skin lesions present
Infants and young children	D	U 24 hrs	Contact Precautions if skin lesions present
Varicella-zoster (See Varicella-Zoster)			
Viral			
Adults	S		

Infants and young children (see respiratory infectious disease, acute, or specific viral agent)			
Poliomyelitis	C	DI	
Pressure ulcer (decubitus ulcer, pressure sore) infected			
Major	C	DI	If no dressing or containment of drainage; until drainage stops or can be contained by dressing
Minor or limited	S		If dressing covers and contains drainage
Prion disease (See Creutzfeld-Jacob Disease)			
Psittacosis (ornithosis) (*Chlamydia psittaci)*	S		Not transmitted from person to person
Q fever	S		
Rabies	S		Person to person transmission rare; transmission via corneal, tissue and organ transplants has been reported [539, 1088]. If patient has bitten another individual or saliva has contaminated an open wound or mucous membrane, wash exposed area thoroughly and administer postexposure prophylaxis. [1089]
Rat-bite fever (*Streptobacillus moniliformis* disease, *Spirillum minus* disease)	S		Not transmitted from person to person
Relapsing fever	S		Not transmitted from person to person
Resistant bacterial infection or colonization (see multidrug-resistant			
Respiratory infectious disease, acute (if not covered elsewhere)			
Adults	S		
Infants and young children	C	DI	Also see syndromes or conditions listed in Table 2
Respiratory syncytial virus infection, in infants, young children and immunocompromised adults	C	DI	Wear mask according to Standard Precautions [24] CB [116, 117]. In immunocompromised patients, extend the duration of Contact Precautions due to prolonged shedding [928]). Reliability of antigen testing to determine when to remove patients with prolonged hospitalizations from Contact Precautions uncertain.
Reye's syndrome	S		Not an infectious condition
Rheumatic fever	S		Not an infectious condition
Rhinovirus	D	DI	Droplet most important route of transmission [104, 1090] Outbreaks have occurred in NICUs and LTCFs [413, 1091, 1092]. Add Contact Precautions if copious moist secretions and close contact likely to occur (e.g., young infants) [111, 833]
Rickettsial fevers, tickborne (Rocky Mountain spotted fever, tickborne typhus fever)	S		Not transmitted from person to person except through transfusion, rarely
Rickettsialpox (vesicular rickettsiosis)	S		Not transmitted from person to person
Ringworm (dermatophytosis, dermatomycosis, tinea)	S		Rarely, outbreaks have occurred in healthcare settings, (e.g., NICU[1093], rehabilitation hospital [1094]. Use Contact Precautions for outbreak.
Ritter's disease (staphylococcal scalded skin syndrome)	C	DI	See staphylococcal disease, scalded skin syndrome below
Rocky Mountain spotted fever	S		Not transmitted from person to person except through transfusion,
Roseola infantum (exanthem subitum; caused by HHV-6)	S		
Rotavirus infection (see gastroenteritis)			

Rubella (German measles) (also see congenital rubella)	D	U 7 days after onset of rash	Susceptible HCWs should not enter room if immune caregivers are available. No recommendation for wearing face protection (e.g., a surgical mask) if immune. Pregnant women who are not immune should not care for these patients [17, 33]. Administer vaccine within three days of exposure to non-pregnant susceptible individuals. Place exposed susceptible patients on Droplet Precautions; exclude susceptible healthcare personnel from duty from day 5 after first exposure to day 21
Rubeola (see measles)			
Salmonellosis (see gastroenteritis)			
Scabies	C	U 24	
Scalded skin syndrome, staphylococcal	C	DI	See staphylococcal disease, scalded skin syndrome below)
Schistosomiasis (bilharziasis)	S		
Severe acute respiratory syndrome (SARS)	A, D,C	DI plus 10 days after resolution of fever, provided respiratory symptoms are absent or improving	Airborne Precautions preferred; D if AIIR unavailable. N95 or higher respiratory protection; surgical mask if N95 unavailable; eye protection (goggles, face shield); aerosol-generating procedures and "supershedders" highest risk for transmission via small droplet nuclei and large droplets [93, 94, 96].Vigilant environmental disinfection (see www.cdc.gov/ncidod/sars)
Shigellosis (see gastroenteritis)			
Smallpox (variola; see vaccinia for management of vaccinated persons)	A,C	DI	Until all scabs have crusted and separated (3-4 weeks). Non-vaccinated HCWs should not provide care when immune HCWs are available; N95 or higher respiratory protection for susceptible and successfully vaccinated individuals; postexposure vaccine within 4 days of exposure protective [108, 129, 1038-1040]
Sporotrichosis	S		
Spirillum minor disease (rat-bite fever)	S		Not transmitted from person to person
Staphylococcal disease (*S aureus*)			
Skin, wound, or burn			
Major	C	DI	No dressing or dressing does not contain drainage adequately
Minor or limited	S		Dressing covers and contains drainage adequately
Enterocolitis	S		Use Contact Precautions for diapered or incontinent children for duration of illness
Multidrug-resistant (see multidrug-resistant organisms)			
Pneumonia	S		
Scalded skin syndrome	C	DI	Consider healthcare personnel as potential source of nursery, NICU outbreak [1095].
Toxic shock syndrome	S		
Streptobacillus moniliformis disease (rat-bite fever)	S		Not transmitted from person to person
Streptococcal disease (group A streptococcus)			
Skin, wound, or burn			
Major	C,D	U 24 hrs	No dressing or dressing does not contain drainage adequately
Minor or limited	S		Dressing covers and contains drainage adequately
Endometritis (puerperal sepsis)	S		
Pharyngitis in infants and young children	D	U 24 hrs	
Pneumonia	D	U 24 hrs	
Scarlet fever in infants and young children	D	U 24 hrs	

Serious invasive disease	D	U24 hrs	Outbreaks of serious invasive disease have occurred secondary to transmission among patients and healthcare personnel [162, 972, 1096-1098] Contact Precautions for draining wound as above; follow rec. for antimicrobial prophylaxis in selected conditions [160].
Streptococcal disease (group B streptococcus), neonatal	S		
Streptococcal disease (not group A or B) unless covered elsewhere	S		
Multidrug-resistant (see multidrug-resistant			
Strongyloidiasis	S		
Syphilis			
Latent (tertiary) and seropositivity without lesions	S		
Skin and mucous membrane, including congenital, primary, Secondary	S		
Tapeworm disease			
Hymenolepis nana	S		Not transmitted from person to person
Taenia solium (pork)	S		
Other	S		
Tetanus	S		Not transmitted from person to person
Tinea (e.g., dermatophytosis, dermatomycosis, ringworm)	S		Rare episodes of person-to-person transmission
Toxoplasmosis	S		Transmission from person to person is rare; vertical transmission from mother to child, transmission through organs and blood transfusion rare
Toxic shock syndrome (staphylococcal disease, streptococcal disease)	S		Droplet Precautions for the first 24 hours after implementation of antibiotic therapy if Group A streptococcus is a likely etiology
Trachoma, acute	S		
Transmissible spongiform encephalopathy (see Creutzfeld-Jacob disease, CJD, vCJD)			
Trench mouth (Vincent's angina)	S		
Trichinosis	S		
Trichomoniasis	S		
Trichuriasis (whipworm disease)	S		
Tuberculosis *(M. tuberculosis)*			
Extrapulmonary, draining lesion)	A,C		Discontinue precautions only when patient is improving clinically, and drainage has ceased or there are three consecutive negative cultures of continued drainage [1025, 1026]. Examine for evidence of active pulmonary tuberculosis.
Extrapulmonary, no draining lesion, meningitis	S		Examine for evidence of pulmonary tuberculosis. For infants and children, use Airborne Precautions until active pulmonary tuberculosis in visiting family members ruled out [42]
Pulmonary or laryngeal disease, confirmed	A		Discontinue precautions only when patient on effective therapy is improving clinically and has three consecutive sputum smears negative for acid-fast bacilli collected on separate days(MMWR 2005; 54: RR-17 http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5417a1.htm?s_cid=rr5417a1_e) [12].
Pulmonary or laryngeal disease, suspected	A		Discontinue precautions only when the likelihood of infectious TB disease is deemed negligible, and either 1) there is another diagnosis that explains the clinical syndrome or 2) the results of three sputum smears for AFB are negative. Each of the three sputum specimens should be collected 8-24 hours apart, and at least one should be an early morning specimen
Skin-test positive with no evidence of current active disease	S		
Tularemia			
Draining lesion	S		

Pulmonary	S		
Typhoid (*Salmonella typhi*) fever (see gastroenteritis)			
Typhus			
Rickettsia prowazekii (Epidemic or Louse-borne typhus)	S		
Rickettsia typhi	S		
Urinary tract infection (including pyelonephritis), with or without	S		
Vaccinia (vaccination site, adverse events following vaccination) *			
Vaccination site care (including autoinoculated areas)	S		
Eczema vaccinatum	C	Until lesions dry and crusted, scabs separated	For contact with virus-containing lesions and exudative material
Fetal vaccinia	C		
Generalized vaccinia	C		
Progressive vaccinia	C		
Postvaccinia encephalitis	S		
Blepharitis or conjunctivitis	S/C		Use Contact Precautions if there is copious drainage
Iritis or keratitis	S		
Vaccinia-associated erythema multiforme (Stevens Johnson	S		Not an infectious condition
Secondary bacterial infection (e.g., S. aureus, group A beta	S/C		Follow organism-specific (strep, staph most frequent) recommendations and consider magnitude of drainage
Varicella Zoster	A,C	Until lesions dry and crusted	Susceptible HCWs should not enter room if immune caregivers are available; no recommendation for face protection of immune HCWs; no recommendation for type of protection, i.e. surgical mask or respirator for susceptible HCWs. In immunocompromised host with varicella pneumonia, prolong duration of precautions for duration of illness. Post-exposure prophylaxis: provide post-exposure vaccine ASAP but within 120 hours; for susceptible exposed persons for whom vaccine is contraindicated (immunocompromised persons, pregnant women, newborns whose mother's varicella onset is ≤5days before delivery or within 48 hrs after delivery) provide VZIG, when available, within 96 hours; if unavailable, use IVIG, Use Airborne Precautions for exposed susceptible persons and exclude exposed susceptible healthcare workers beginning 8 days after first exposure until 21 days after last exposure or 28 if received VZIG, regardless of postexposure vaccination. [1036].
Variola (see smallpox)			
Vibrio parahaemolyticus (see gastroenteritis)			
Vincent's angina (trench mouth)	S		
Viral hemorrhagic fevers due to Lassa, Ebola, Marburg, Crimean-Congo fever viruses	S, D, C	DI	Single-patient room preferred. Emphasize: 1) use of sharps safety devices and safe work practices, 2) hand hygiene; 3) barrier protection against blood and body fluids upon entry into room (single gloves and fluid-resistant or impermeable gown, face/eye protection with masks, goggles or face shields); and 4) appropriate waste handling. Use N95 or higher respirators when performing aerosol-generating procedures. Largest viral load in final stages of illness when hemorrhage may occur; additional PPE, including double gloves, leg and shoe coverings may be used, especially in resource-limited settings where options for cleaning and laundry are limited. Notify public health officials immediately if Ebola is suspected [212, 314, 740, 772] Also see Table 3 for Ebola as a bioterrorism agent
Viral respiratory diseases (not covered elsewhere)			
Adults	S		
Infants and young children (see respiratory infectious disease, acute)			

Whooping cough (see pertussis)			
Wound infections			
Major	C	DI	No dressing or dressing does not contain drainage adequately
Minor or limited	S		Dressing covers and contains drainage adequately
Yersinia enterocolitica gastroenteritis (see gastroenteritis)			
Zoster (varicella-zoster) (see herpes zoster)			
Zygomycosis (phycomycosis, mucormycosis)	S		Not transmitted person-to-person

TABLE 2. CLINICAL SYNDROMES OR CONDITIONS WARRANTING EMPIRIC TRANSMISSION-BASED PRECAUTIONS IN ADDITION TO STANDARD PRECAUTIONS PENDING CONFIRMATION OF DIAGNOSIS*

Clinical Syndrome or Condition†	Potential Pathogens‡	Empiric Precautions (Always includes Standard Precautions)
DIARRHEA		
Acute diarrhea with a likely infectious cause in an incontinent or diapered patient	Enteric pathogens§	Contact Precautions (pediatrics and adult)
MENINGITIS	*Neisseria meningitidis*	Droplet Precautions for first 24 hrs of antimicrobial therapy; mask and face protection for intubation
	Enteroviruses	Contact Precautions for infants and children
	M. tuberculosis	Airborne Precautions if pulmonary infiltrate Airborne Precautions plus Contact Precautions if potentially infectious draining body fluid present
RASH OR EXANTHEMS, GENERALIZED, ETIOLOGY UNKNOWN		
Petechial/ecchymotic with fever (general)	*Neisseria meningitides*	Droplet Precautions for first 24 hrs of antimicrobial therapy
- If positive history of travel to an area with an ongoing outbreak of VHF in the 10 days before onset of fever	Ebola, Lassa, Marburg viruses	Droplet Precautions plus Contact Precautions, with face/eye protection, emphasizing safety sharps and barrier precautions when blood exposure likely. Use N95 or higher respiratory protection when aerosol-generating procedure performed

Vesicular	Varicella-zoster, *herpes simplex,* variola (smallpox), vaccinia viruses Vaccinia virus	Airborne plus Contact Precautions; Contact Precautions only if *herpes simplex,* localized zoster in an immunocompetent host or vaccinia viruses most likely
Maculopapular with cough, coryza and fever	Rubeola (measles) virus	Airborne Precautions

Clinical Syndrome or Condition†	Potential Pathogens‡	Empiric Precautions (Always includes Standard Precautions)
RESPIRATORY INFECTIONS		
Cough/fever/upper lobe pulmonary infiltrate in an HIV-negative patient or a patient at low risk for human immunodeficiency virus (HIV) infection	*M. tuberculosis,* Respiratory viruses, *S. pneumoniae, S. aureus* (MSSA or MRSA)	Airborne Precautions plus Contact precautions
Cough/fever/pulmonary infiltrate in any lung location in an HIV-infected patient or a patient at high risk for HIV infection	*M. tuberculosis,* Respiratory viruses, *S. pneumoniae, S. aureus* (MSSA or MRSA)	Airborne Precautions plus Contact Precautions Use eye/face protection if aerosol-generating procedure performed or contact with respiratory secretions anticipated. If tuberculosis is unlikely and there are no AIIRs and/or respirators available, use Droplet Precautions instead of Airborne Precautions Tuberculosis more likely in HIV-infected individual than in HIV negative individual
Cough/fever/pulmonary infiltrate in any lung location in a patient with a history of recent travel (10-21 days) to countries with active outbreaks of SARS, avian influenza	*M. tuberculosis,* severe acute respiratory syndrome virus (SARS-CoV), avian influenza	Airborne plus Contact Precautions plus eye protection. If SARS and tuberculosis unlikely, use Droplet Precautions instead of Airborne Precautions.
Respiratory infections, particularly bronchiolitis and pneumonia, in infants and young children	Respiratory syncytial virus, parainfluenza virus, adenovirus, influenza virus, Human metapneumovirus	Contact plus Droplet Precautions; Droplet Precautions may be discontinued when adenovirus and influenza have been ruled out

Skin or Wound Infection		
Abscess or draining wound that cannot be covered	*Staphylococcus aureus* (MSSA or MRSA), group A streptococcus	Contact Precautions Add Droplet Precautions for the first 24 hours of appropriate antimicrobial therapy if invasive Group A streptococcal disease is suspected

* Infection control professionals should modify or adapt this table according to local conditions. To ensure that appropriate empiric precautions are implemented always, hospitals must have systems in place to evaluate patients routinely according to these criteria as part of their preadmission and admission care.

† Patients with the syndromes or conditions listed below may present with atypical signs or symptoms (e.g.neonates and adults with pertussis may not have paroxysmal or severe cough). The clinician's index of suspicion should be guided by the prevalence of specific conditions in the community, as well as clinical judgment.

‡ The organisms listed under the column "Potential Pathogens" are not intended to represent the complete, or even most likely, diagnoses, but rather possible etiologic agents that require additional precautions beyond Standard Precautions until they can be ruled out.

§ These pathogens include enterohemorrhagic *Escherichia coli* O157:H7, *Shigella spp,* hepatitis A virus, noroviruses, rotavirus, *C. difficile*.

TABLE 3.
INFECTION CONTROL CONSIDERATIONS FOR HIGH-PRIORITY (CDC CATEGORY A) DISEASES THAT MAY RESULT FROM BIOTERRORIST ATTACKS OR ARE CONSIDERED TO BE BIOTERRORIST THREATS
(www.bt.cdc.gov) [a]
[a] Abbreviations used in this table: RT = respiratory tract; GIT = gastrointestinal tract; CXR = chest x-ray; CT = computerized axial tomography; CSF = cerebrospinal fluid; and LD_{50} – lethal dose for 50% of experimental animals; HCWs = healthcare worker; BSL = biosafety level; PAPR = powered air purifying respirator; PCR = polymerase chain reaction; IHC = immunohistochemistry

Disease	**Anthrax**
Site(s) of Infection; Transmission Mode Cutaneous and inhalation disease have occurred in past bioterrorist incidents	**Cutaneous** (contact with spores);**RT** (inhalation of spores);**GIT** (ingestion of spores - rare) **Comment:** Spores can be inhaled into the lower respiratory tract. The infectious dose of *B. anthracis* in humans by any route is not precisely known. In primates, the LD50 (i.e., the dose required to kill 50% of animals) for an aerosol challenge with *B. anthracis* is estimated to be 8,000–50,000 spores; the infectious dose may be as low as 1-3 spores
Incubation Period	**Cutaneous**: 1 to12 days; **RT**: Usually 1 to 7 days but up to 43 days reported; **GIT**: 15-72 hours
Clinical Features	**Cutaneous:** Painless, reddish papule, which develops a central vesicle or bulla in 1-2 days; over next 3-7 days lesion becomes pustular, and then necrotic, with black eschar; extensive surrounding edema. **RT:** initial flu-like illness for 1-3 days with headache, fever, malaise, cough; by day 4 severe dyspnea and shock, and is usually fatal (85%-90% if untreated; meningitis in 50% of RT cases. **GIT**: ; if intestinal form, necrotic, ulcerated edematous lesions develop in intestines with fever, nausea and vomiting, progression to hematemesis and bloody diarrhea; 25-60% fatal
Diagnosis	**Cutaneous:** Swabs of lesion (under eschar) for IHC, PCR and culture; punch biopsy for IHC, PCR and culture; vesicular fluid aspirate for Gram stain and culture; blood culture if systemic symptoms; acute and

	convalescent sera for ELISA serology **RT:** CXR or CT demonstrating wide mediastinal widening and/or pleural effusion, hilar abnormalities; blood for culture and PCR; pleural effusion for culture, PCR and IHC; CSF if meningeal signs present for IHC, PCR and culture; acute and convalescent sera for ELISA serology; pleural and/or bronchial biopsies IHC. **GIT:** blood and ascites fluid, stool samples, rectal swabs, and swabs of oropharyngeal lesions if present for culture, PCR and IHC
Infectivity	**Cutaneous:** Person-to-person transmission from contact with lesion of untreated patient possible, but extremely rare. **RT and GIT:** Person-to-person transmission does not occur. **Aerosolized powder, environmental exposures:** Highly infectious if aerosolized
Recommended Precautions	**Cutaneous**: Standard Precautions; Contact Precautions if uncontained copious drainage. **RT and GIT:** Standard Precautions. **Aerosolized powder, environmental exposures:** Respirator (N95 mask or PAPRs), protective clothing; decontamination of persons with powder on them (http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5135a3.htm) **Hand hygiene:** Handwashing for 30-60 seconds with soap and water or 2% chlorhexidene gluconate after spore contact (alcohol handrubs inactive against spores [Weber DJ JAMA 2003; 289:1274]). **Post-exposure prophylaxis following environmental exposure**: 60 days of antimicrobials (either doxycycline, ciprofloxacin, or levofloxacin) and post-exposure vaccine under IND

Disease	**Botulism**
Site(s) of Infection; Transmission Mode	**GIT:** Ingestion of toxin-containing food, **RT:** Inhalation of toxin containing aerosol cause disease. **Comment:** Toxin ingested or potentially delivered by aerosol in bioterrorist incidents. LD_{50} for type A is 0.001 μg/ml/kg.
Incubation Period	1-5 days.
Clinical Features	Ptosis, generalized weakness, dizziness, dry mouth and throat, blurred vision, diplopia, dysarthria, dysphonia, and dysphagia followed by symmetrical descending paralysis and respiratory failure.

Diagnosis	Clinical diagnosis; identification of toxin in stool, serology unless toxin-containing material available for toxin neutralization bioassays.
Infectivity	Not transmitted from person to person. Exposure to toxin necessary for disease.
Recommended Precautions	Standard Precautions.
Disease	**Ebola Hemorrhagic Fever**
Site(s) of Infection; Transmission Mode	As a rule infection develops after exposure of mucous membranes or RT, or through broken skin or percutaneous injury.
Incubation Period	2-19 days, usually 5-10 days
Clinical Features	Febrile illnesses with malaise, myalgias, headache, vomiting and diarrhea that are rapidly complicated by hypotension, shock, and hemorrhagic features. Massive hemorrhage in < 50% pts.
Diagnosis	Etiologic diagnosis can be made using RT-PCR, serologic detection of antibody and antigen, pathologic assessment with immunohistochemistry and viral culture with EM confirmation of morphology,
Infectivity	Person-to-person transmission primarily occurs through unprotected contact with blood and body fluids; percutaneous injuries (e.g., needlestick) associated with a high rate of transmission; transmission in healthcare settings has been reported but is prevented by use of barrier precautions.
Recommended Precautions	**Hemorrhagic fever specific barrier precautions**: If disease is believed to be related to intentional release of a bioweapon, epidemiology of transmission is unpredictable pending observation of disease transmission. Until the nature of the pathogen is understood and its transmission pattern confirmed, Standard, Contact and Airborne Precautions should be used. Once the pathogen is characterized, if the epidemiology of transmission is consistent with natural disease, Droplet Precautions can be substituted for Airborne Precautions. Emphasize: 1) use of sharps safety devices and safe work practices, 2) hand hygiene; 3) barrier protection against blood and body fluids upon entry into room (single gloves and fluid-resistant or impermeable gown, face/eye protection with masks, goggles or face shields); and 4) appropriate waste handling. Use N95 or higher respirators when performing aerosol-generating procedures. In settings where AIIRs are unavailable or the large numbers of patients cannot be accommodated by existing AIIRs, observe Droplet Precautions (plus Standard Precautions and Contact Precautions) and segregate patients from those not suspected of VHF infection. Limit blooddraws to those essential to care. See text for discussion and Appendix A for recommendations for naturally

	occurring VHFs.

Disease	Plague[2]
Site(s) of Infection; Transmission Mode	**RT:** Inhalation of respiratory droplets. **Comment**: Pneumonic plague most likely to occur if used as a biological weapon, but some cases of bubonic and primary septicemia may also occur. Infective dose 100 to 500 bacteria
Incubation Period	1 to 6, usually 2 to 3 days.
Clinical Features	Pneumonic: fever, chills, headache, cough, dyspnea, rapid progression of weakness, and in a later stage hemoptysis, circulatory collapse, and bleeding diathesis
Diagnosis	Presumptive diagnosis from Gram stain or Wayson stain of sputum, blood, or lymph node aspirate; definitive diagnosis from cultures of same material, or paired acute/convalescent serology.
Infectivity	Person-to-person transmission occurs via respiratory droplets risk of transmission is low during first 20-24 hours of illness and requires close contact. Respiratory secretions probably are not infectious within a few hours after initiation of appropriate therapy.
Recommended Precautions	Standard Precautions, Droplet Precautions until patients have received 48 hours of appropriate therapy. **Chemoprophylaxis:** Consider antibiotic prophylaxis for HCWs with close contact exposure.

[2] Pneumonic plague is not as contagious as is often thought. Historical accounts and contemporary evidence indicate that persons with plague usually only transmit the infection when the disease is in the end stage. These persons cough copious amounts of bloody sputum that contains many plague bacteria. Patients in the early stage of primary pneumonic plague (approximately the first 20–24 h) apparently pose little risk [1, 2]. Antibiotic medication rapidly clears the sputum of plague bacilli, so that a patient generally is not infective within hours after initiation of effective antibiotic treatment [3]. This means that in modern times many patients will never reach a stage where they pose a significant risk to others. Even in the end stage of disease, transmission only occurs after close contact. Simple protective measures, such as wearing masks, good hygiene, and avoiding close contact, have been effective to interrupt transmission during many pneumonic plague outbreaks [2]. In the United States, the last known cases of person to person transmission of pneumonic plague occurred in 1925 [2].

1. Wu L-T. A treatise on pneumonic plague. Geneva: League of Nations, 1926. III. Health.

2. Kool JL. Risk of person to person transmission of pneumonic plague. Clinical Infectious Diseases, 2005; 40 (8): 1166-1172

3. Butler TC. Plague and other Yersinia infections. In: Greenough WB, ed. Current topics in infectious disease. New York: Plenum Medical Book Company, 1983.

Disease	Smallpox
Site(s) of Infection; Transmission Mode	**RT** Inhalation of droplet or, rarely, aerosols; and skin lesions (contact with virus). **Comment:** If used as a biological weapon, natural disease, which has not occurred since 1977, will likely result.
Incubation Period	7 to 19 days (mean 12 days)
Clinical Features	Fever, malaise, backache, headache, and often vomiting for 2-3 days; then generalized papular or maculopapular rash (more on face and extremities), which becomes vesicular (on day 4 or 5) and then pustular; lesions all in same stage.
Diagnosis	Electron microscopy of vesicular fluid or culture of vesicular fluid by WHO approved laboratory (CDC); detection by PCR available only in select LRN labs, CDC and USAMRID
Infectivity	Secondary attack rates up to 50% in unvaccinated persons; infected persons may transmit disease from time rash appears until all lesions have crusted over (about 3 weeks); greatest infectivity during first 10 days of rash.
Recommended Precautions	Combined use of Standard, Contact, and Airborne Precautions[b] until all scabs have separated (3-4 weeks). Only immune HCWs to care for pts; post-exposure vaccine within 4 days. **Vaccinia:** HCWs cover vaccination site with gauze and semi-permeable dressing until scab separates (≥21 days). Observe hand hygiene. **Adverse events with virus-containing lesions:** Standard plus Contact Precautions until all lesions crusted

[b] Transmission by the airborne route is a rare event; Airborne Precautions is recommended when possible, but in the event of mass exposures, barrier precautions and containment within a designated area are most important [204, 212].

[c] Vaccinia adverse events with lesions containing infectious virus include inadvertent autoinoculation, ocular lesions (blepharitis, conjunctivitis), generalized vaccinia, progressive vaccinia, eczema vaccinatum; bacterial superinfection also requires addition of contact precautions if exudates cannot be contained [216, 217].

Disease	Tularemia
Site(s) of Infection; Transmission Mode	**RT:** Inhalation of aerosolized bacteria. **GIT:** Ingestion of food or drink contaminated with aerosolized bacteria. **Comment:** Pneumonic or typhoidal disease likely to occur after bioterrorist event using aerosol delivery. Infective dose 10-50 bacteria
Incubation Period	2 to 10 days, usually 3 to 5 days
Clinical Features	Pneumonic: malaise, cough, sputum production, dyspnea; Typhoidal: fever, prostration, weight loss and frequently an associated pneumonia.
Diagnosis	Diagnosis usually made with serology on acute and convalescent serum specimens; bacterium can be detected by PCR (LRN) or isolated from blood and other body fluids on cysteine-enriched media or mouse inoculation.
Infectivity	Person-to-person spread is rare. Laboratory workers who encounter/handle cultures of this organism are at high risk for disease if exposed.
Recommended Precautions	Standard Precautions

TABLE 4.
RECOMMENDATIONS FOR APPLICATION OF STANDARD PRECAUTIONS FOR THE CARE OF ALL PATIENTS IN ALL HEALTHCARE SETTINGS
(See Sections II.D.-II.J. and III.A.1)

COMPONENT	RECOMMENDATIONS
Hand hygiene	After touching blood, body fluids, secretions, excretions, contaminated items; immediately after removing gloves; between patient contacts.
Personal protective equipment (PPE)	
Gloves	For touching blood, body fluids, secretions, excretions, contaminated items; for touching mucous membranes and nonintact skin
Gown	During procedures and patient-care activities when contact of clothing/exposed skin with blood/body fluids, secretions, and excretions is anticipated..
Mask, eye protection (goggles), face shield*	During procedures and patient-care activities likely to generate splashes or sprays of blood, body fluids, secretions, especially suctioning, endotracheal intubation
Soiled patient-care equipment	Handle in a manner that prevents transfer of microorganisms to others and to the environment; wear gloves if visibly contaminated; perform hand hygiene.
Environmental control	Develop procedures for routine care, cleaning, and disinfection of environmental surfaces, especially frequently touched surfaces in patient-care areas.
Textiles and laundry	Handle in a manner that prevents transfer of microorganisms to others and to the environment
Needles and other sharps	Do not recap, bend, break, or hand-manipulate used needles; if recapping is required, use a one-handed scoop technique only; use safety features when available; place used sharps in puncture-resistant container
Patient resuscitation	Use mouthpiece, resuscitation bag, other ventilation devices to prevent contact with mouth and oral secretions

Patient placement	Prioritize for single-patient room if patient is at increased risk of transmission, is likely to contaminate the environment, does not maintain appropriate hygiene, or is at increased risk of acquiring infection or developing adverse outcome following infection.
Respiratory hygiene/cough etiquette (source containment of infectious respiratory secretions in symptomatic patients, beginning at initial point of encounter e.g., triage and reception areas in emergency departments and physician offices)	Instruct symptomatic persons to cover mouth/nose when sneezing/coughing; use tissues and dispose in no-touch receptacle; observe hand hygiene after soiling of hands with respiratory secretions; wear surgical mask if tolerated or maintain spatial separation, >3 feet if possible.

* * During aerosol-generating procedures on patients with suspected or proven infections transmitted by respiratory aerosols (e.g., SARS), wear a fit-tested N95 or higher respirator in addition to gloves, gown,and face/eye protection.

Internal Medicine

1. SCOPE

1.1. System Wide: This procedure applies to all regional telepresenters working with SIU HealthCare providers and SIU HealthCare's partner TeleHealth organizations providing care via TeleHealth.

2. PURPOSE

2.1. To outline the process for TeleHealth patient sites to prepare the environment and the patient for a TeleInternal Medicine visit and to outline equipment, procedures, and physical exam requirements for working with an Internist via TeleHealth.

3. DEFINITIONS & EXPLANATIONS OF TERMS

3.1. **Polycom**: refers to the clinical video conferencing device or software. Used interchangeably with Codec

3.2. **Chronic Hypertension**: long term condition in which blood pressure in arteries is persistently elevated to 140/90 or greater

3.3. **Primary (Essential) Hypertension**: hypertension that has no identifiable cause

3.4. **Xanthelasma**: are yellow lipid lesions on the eyelids associated with hyperlipidemia

3.5. **Corneal arcus**: whitish opaque ring around junction of cornea and sclera.

3.6. **Cyanosis**: decreased oxygenation/hypoxia.

3.7. **Systolic Pressure:** maximum pressure felt on the artery during systole or when the heart is beating (typically 120mm Hg in young adults)

3.8. **Diastolic Pressure**: resting pressure that the blood exerts constantly between each contraction (typically 80mm Hg in young adults)

4. PROCEDURE BODY

All clinical staff responsible for the presenting of patients to Internal Medicine Services or any provider who may need a component of an Internal Medicine history or physical exam shall be proficient in providing internal medicine exam data via TeleHealth technologies.

All clinical staff responsible for the presenting of patients to Internal Medicine Services or any provider who may need a component of an Internal Medicine history or physical exam shall be appropriately trained.

4.1. Internal Medicine Referral Process

- In order to schedule a TeleInternal Medicine consult, follow the SIU HealthCare Appointment Process

4.2. Pre-Consult Preparation

- Clean and prepare exam table for patient
- Turn on lights appropriate to provide lighting for patient's face and affected area(s). Obtain an exam light if necessary
- Prepare technology to include: digital still camera, otoscope, hand held camera, digital stethoscope and Polycom **one hour prior** to the TeleHealth visit.
  - **Make a test call at this time if system has not been used recently or desired**
- Review and have readily available pertinent patient information for the exam

4.3. Patient Preparation

- When escorting patient from the waiting area to the TeleHealth room, ask patient if they brought any required forms provided by clinician office via mail prior to appointment and obtain height and weight if applicable
- Inquire as to whether or not the patient has ever "seen the doctor on a television screen for an appointment" before
- If the patient answers "**No**":
  - Explain TeleHealth
  - How it works – two way audio and video over a secure network
  - That the telepresenter will use cameras to show clear pictures of the patient's condition
  - Emphasize that this is secure and private and that no one else is able to see and hear the visit (just as if this were an in person visit)
  - That the patient has the right to request that a resident or any other person who is in the room on the provider's end to leave
  - That the telepresenter will stay in the room with the patient during the visit to run the equipment and help the provider, but that if the patient desires private time with the provider, they can request for the telepresenter to step out of the room
  - The patient should always ask the provider to repeat anything the patient did not hear or understand
- Complete vital signs. This should include: temperature, blood pressure, pulse, respirations, and height and weight. Enter results in the SIU HIPAA compliant PHI transfer system.
- Complete the SIU Internal Medicine Health History form
- Verify medications (include dose and frequency), update if necessary. Also verify allergies, update if necessary.
- Have the patient remove clothing, jewelry, and make-up as necessary to obtain adequate view. Offer the patient a gown if necessary
- Frame the patient
- Take pictures of the affected area(s) (of any incisions, wounds, and/or ulcers) according to the SIU Photography Protocol and upload to the SIU File Transfer system
- Complete the **"Pre-Exam Physical"** (Section 4.4)
- **Fax** any patient information **not** documented in the EHR to the provider's office

staff prior to the start of the appointment

- Call the provider's office to inform them that the patient is ready and ask them the staff to check the patient in to the provider's schedule
- Wait with the patient for the provider to call on the video system.

4.4. Pre-Exam Physical

4.4.1. Pulses: assess radial, femoral and pedal pulses bilaterally: assess for strength (i.e. absent/present, equal) and/or a three point scale of:

4.4.1.1. 3+= bounding, hyperkinetic

4.4.1.2. 2+= normal

4.4.1.3. 1+= weak, thready, hypokinetic

4.4.1.4. 0 = absent

- Regularity: regular or irregular
- Equality: bilaterally are the pulses equal or not

4.4.2. Instruct the patient to sit upright at a 90-degree angle. Veins are normally flat and pulsations are not evident. Then ask the patient to lie supine with the head elevated 30-45 degrees. Hyperextension or flexion may stretch or kink the vein. Apply moderately firm pressure with the palm of your hand over the patient's right upper abdominal quadrant for 30-60 seconds. If jugular venous pressure increases, the vein will appear more prominent.

4.4.3. Assess for **Edema** (record in SIU TeleHealth PHI transfer system):

4.4.3.1. 1+= slight pitting: no visible change in the shape of the leg (skin indents 2mm)

4.4.3.2. 2+= somewhat deeper pitting; no marked change in the shape of the leg (skin indents 4mm)

4.4.3.3. 3+= pitting is deep; leg is full and swollen (skin indents 6mm)

4.4.3.4. 4+= pitting is very deep; leg is very swollen (skin indents 8mm +)

4.4.4. Color: Note the color of the skin. Is there any redness, brownish areas near the ankle, or ulcers? If edema present, how far up the leg does it go?

4.4.5. Blood Pressure: Obtain a reading in XXX extremities noting where each reading was obtained

4.4.5.1. Be sure to choose the appropriate cuff size for the patient

4.4.5.1.1. A cuff that is too narrow will give a false high

4.4.5.1.2. A cuff that is too wide will give a lower pressure

4.4.5.2. Be sure the patient is comfortable and relaxed without legs or ankles crossed and place the patient's arm on a table or desk so that it is at heart level

4.4.5.2.1. Allow a 3-5 minutes rest before measuring blood pressure

4.4.5.2.2. Allow a 2 minute separation between additional readings

4.4.5.3. Orthostatic Blood Pressure

4.4.5.3.1. Have the patient lie down for 5 minutes

4.4.5.3.1.1. Measure blood pressure and pulse (one (1) full minute)

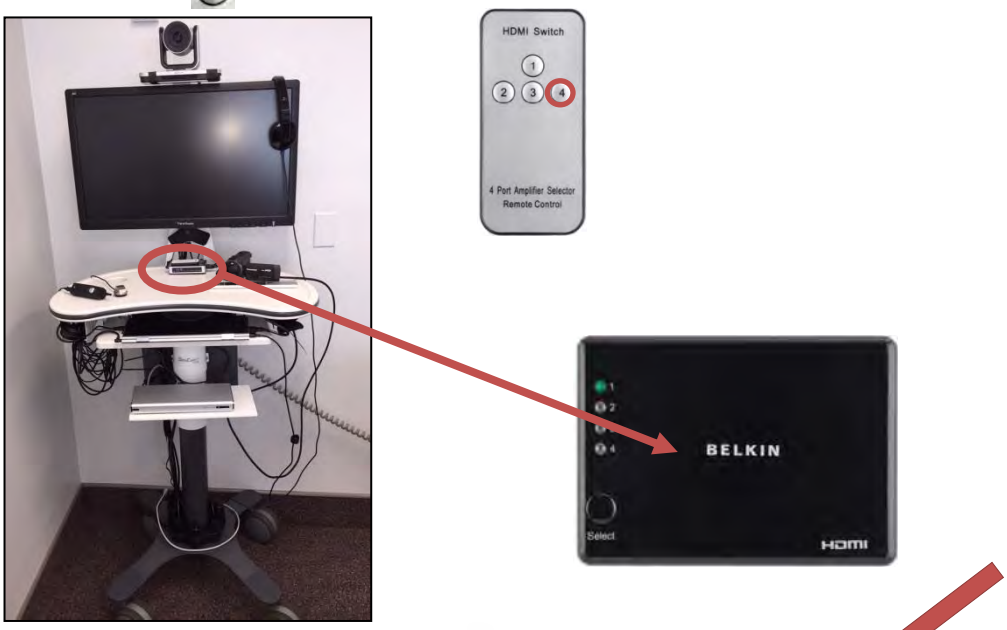
4.4.5.3.2. Have the patient stand

4.4.5.3.2.1. Repeat the blood pressure and pulse after 1 minute of standing and three minutes standing

4.5. Assisting Provider with Physical Exam

4.5.1. Be prepared to assist the provider with the physical exam. The provider will direct the nurse in the room.

- Ensure that the patient is always framed appropriately so the provider can see all aspects of the patient interaction.
- While the provider is talking to the patient and taking a history, make sure that the hand-held video camera is convenient and available for a live exam
  - When the provider asks for additional assistance with examining and viewing the patient via the hand-held video camera:
    - Switch the HD input by using the "HDMI Switch" remote and selecting 4



    - Press the camera/play button on the camera

- Narrate the location and position of the image that is being displayed i.e., 'right hand', 'left lower leg', etc.
- Slowly move the video camera over the requested areas and wait for the Internist to direct the exam
- When finished with the live exam, set the camera down on the cart and return to telepresenting requirements of input 1 by pressing the 1 or 2 on the HDMI switch remote.

4.5.2. Ears and Mouth

- Using the fiber optic otoscope to view both ear canals and oral cavity, allowing the provider to assess for cyanotic mucous membrane.

4.5.3. Eyes

- Using the hand held camera or room camera to zoom in on the eyes allowing the provider to assess the eyes for xanthelasma, corneal arcus, pale conjunctivae- associated with anemia; cyanotic conjunctivae, or petechiae on conjunctivae.

4.5.4.Lungs:

- With the patient's posterior side to the room camera, place limited pressure with the digital stethoscope at the six posterior lung fields for two complete inspirations and expirations. Begin with the upper lobes of the lung, moving the diaphragm of the stethoscope in a ladder-like pattern, from one side to the other. This will allow the provider to identify patterns of breath sounds and compare symmetric areas of the lungs. Then with the patient's anterior side facing the room camera, use the digital stethoscope to auscultate two anterior lung fields.

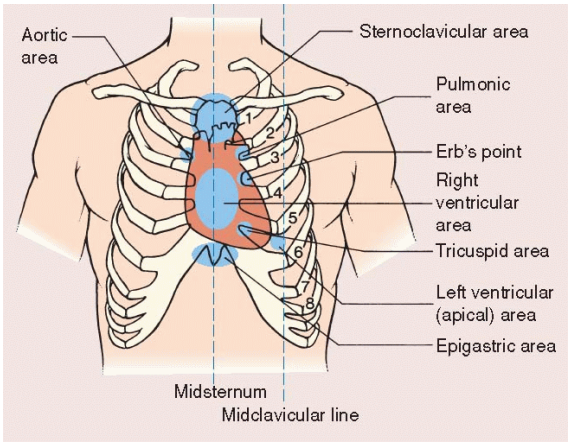
4.5.5. Heart: with the patient's anterior side to the room camera, apply limited pressure to the digital stethoscope to auscultate.

4.5.5.1.Aortic valve at the second right intercostal space at the sternal border.

4.5.5.2.Pulmonic valve at the second left intercostal space at the sternal border.

4.5.5.3.Secondary aortic at the third left intercostal space at the sternal border.

4.5.5.4.Tricuspid valve at the fifth left intercostal space at the sternal border.



4.5.5.5.Point of Maximal Impulse (PMI) is at the apex; fifth left intercostal space at the midclavicular line.

4.5.5.6. Epigastric area, tip of the sternum.

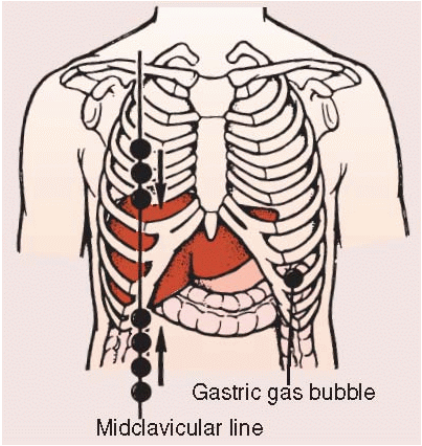
- Watch the provider for cues to move to the next landmark.
- Abdominal exam: be prepared to use the room camera and hand held camera.

4.5.6. Assessment for Aortic Aneurysms (AA): with the patient laying supine, pan room camera out to display patient lying on exam table. Press firmly and deep into the upper abdomen, slightly left of the midline, and identify the aortic pulsations. In people older than 50, try to assess the width of the aorta by pressing deeply in the upper abdomen with one hand on each side of the aorta. Report any dilation of the aorta to the provider. Normal aorta width is not more than 3cm for persons age 50 or >; average width is 2.5cm (not including the thickness of the abdominal wall).

4.5.7. Assessment for Renal Artery Stenosis: Gently place the stethoscope on the abdomen. Hold digital stethoscope lightly against the abdomen over the upper midline or toward the flank. The provider is assessing for medium to low pitched murmurs resulting from renal artery stenosis.

4.5.7.1. For the hypertensive patient, listen carefully over the center epigatrium and posterior flank for a bruit in the arterial tree. An epigastric bruit radiating laterally suggests renal artery stenosis.

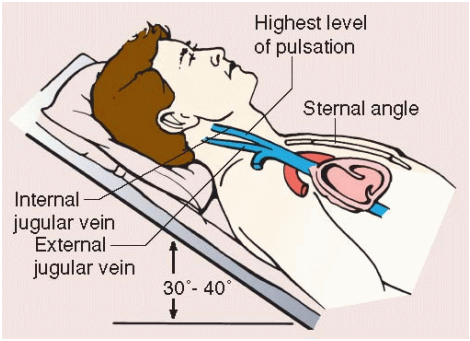
4.5.8. Assessment for Hepatomegaly: Assess the descent of the liver by asking the patient to take a deep breath in and hold it while the nurse percusses upward from the abdomen to detect the lower liver border. The liver will normally descend 2-3cm with inspiration. This maneuver can help guide placement of your hands for palpating the liver border.



4.5.8.1. The suggested ranges of normal values are 6-12cm in the midclavicular line and 4-8cm in the mid-sternal line A direct correlation exists between body size and liver span. Men have larger livers than women. The mean midclavicular liver span in men is 10.5cm, whereas in women it is 7cm.

4.5.9. Assess Jugular Venous Distention (JVD).

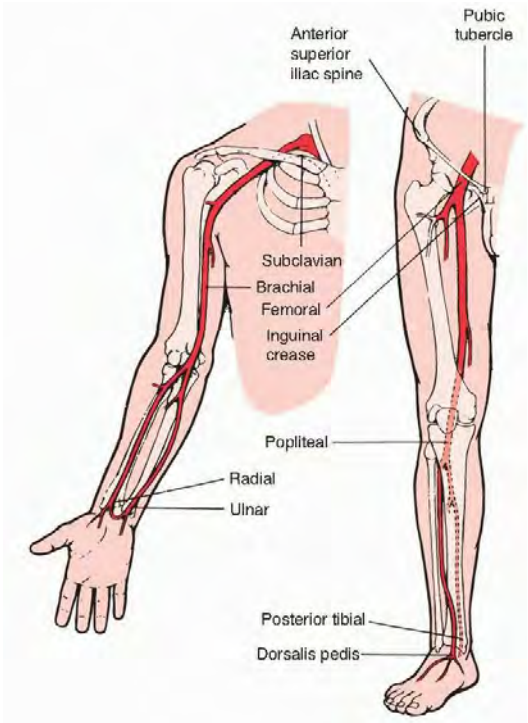
4.5.9.1. Distention in the jugular veins reflects right arterial pressure, giving providers' important clinical indicator of cardiac function and right heart hemodynamics. JVD is evaluated best from the right internal jugular vein, because the right internal vein has a more direct anatomic channel into the right atrium. Display patient sitting and lying with the room camera.



First instruct the patient to sit upright at a 90-degree angle. Veins are normally flat and pulsations are not evident. Then ask the patient to lie supine with the head slightly elevated 30-45 degrees. Hyperextension or flexion may stretch or kink the vein. Apply moderately firm pressure with the palm of hand over the patient's right upper abdominal quadrant for 30-60 seconds. If jugular venous pressure increases, the vein will appear more prominent.

4.5.10. Carotid Pulse: with the patient sitting at a 90-degree angle on the edge of the exam table or laying supine with the head elevated 30-degrees, place the digital stethoscope on the lower third of the neck, medial to the sternomastoid muscles, checking carotid pulses bilaterally. NEVER palpate or press both carotids at the same time; this may decrease blood flow to the brain and induce syncope. Decreased pulsations may be caused by decreased stroke volume, but may also result from local factors in the artery such as atherosclerotic narrowing or occlusion.

4.5.11. Peripheral Exam: Assessment of the peripheral vascular system requires inspection of the arms and legs for: size, swelling, symmetry, discoloration, wounds, and ulcers, palpate pulses bilaterally, and evaluate edema. Display patient on exam table with the room camera, palpate the pulses in order to assess the arterial circulation.



4.5.11.1. Palpate the radial pulses bilaterally with the pads of your fingers on the flexor surface of the wrist laterally. Partially flexing the patient's wrist may help to palpate the pulses.

4.5.11.2. Palpate the femoral pulses bilaterally by pressing deeply below the inguinal ligament and about midway between the anterior superior iliac spine and the symphysis pubis. The use of two hands, one on top of the other may facilitate palpation of the femoral pulses, especially in obese patients.

4.5.11.3. Palpate dorsalis pedis pulses bilaterally. Feel the dorsum of the foot (not the ankle) just lateral to the extensor tendon of the great toe.

Bounding radial and femoral pulses are present in aortic insufficiency; asymmetric, diminished pulses are present in arterial occlusion from atherosclerosis or embolism. Use hand held camera to zoom in on any skin discoloration, wounds, ulcers, surgical sites, and swelling to allow provider to evaluate for venous insufficiency, infection and/or thrombus.

4.6. Post Femoral Artery (Groin) Cardiac Catheterization Exam Review of Systems

4.6.1. **Assess and report**: Fever/Chills, Chest Pain, shortness of breath, groin pain, and edema.

4.6.2. Groin site assessment:

4.6.2.1. Palpate site and assess for pain/tenderness.

4.6.2.2. Assess Femoral artery for hematoma, ecchymosis, redness, bruit, and discharge. Note if angioseal or manual pressure was applied. This will be found in the cardiac catheterization report.

4.6.2.3. Check femoral artery pulse and pedal pulse on the side of the groin access.

- **Pulse grading:**

0=absent; 1+ = Barely Palpable; 2+ = Normal; 3+ = Enlarged; 4+ = Aneurysmal

4.7. Post Physical Exam

- Reframe the patient so the patient and provider have good positions for their closing discussion.
- Move out of the direct view of the video system.
- Once physician has ended the appointment, turn off all equipment used during exam
- Provide any pamphlets, handouts, or other materials as requested by the Cardiologist located in the SIU TeleHealth Patient Materials binder (provided by the SIU TeleHealth Clinical Coordinator)
- Assist the patient with dressing or any other needs and assist them in exiting the room

4.8. Post Consult Considerations

- Reinforce any patient teaching.
- Assist the patient with instructions for using any prescribed medications.
- Make sure the patient has a follow-up appointment if needed and a business card for the provider
- Give the patient the SIU TeleHealth Patient Satisfaction Survey and if possible, have them complete this form prior to leaving and return with the TeleHealth Technology Report Form.
    - If not, please ask the patient to complete this survey and return in one of the envelopes provided by SIU TeleHealth.
- Enter TeleHealth Facility Fee charge in billing system.
- Fill out TeleHealth Technology Report Form (located on the SIU TeleHealth website) and return in provided business reply envelopes

5. ADDITIONAL RESOURCES

5.1. References:

Bickley, L.S. and Szilagyi, P.G. (2007). *Bates' guide to physical examination and history taking* (9th ed.). Philadelphia: Lippincott Williams & Wilkins.

5.2. Additional Questions:

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How to follow a low salt (sodium) diet

Your symptoms of dizziness may be related to Menieres disease. Sodium - or salt - is poison to the ear with Menieres disease. The best first treatment to control the dizzy spells is to minimize the amount of salt - also known as sodium - in your diet.

The typical American has a high salt diet, taking in 4000 to 6000 mg of sodium each day. Controlling Menieres disease requires keeping sodium intake to 2000 mg or less each day. What is important is the total amount of sodium you are eating each day.

How do you accomplish this goal?

- Do not use salt at the table
- Reduce the salt used in food preparation. Try 1/2 teaspoon when recipes call for 1 teaspoon. Many cakes and desserts can be prepared without adding salt.
- Use herbs and spices for flavoring meats and vegetables instead of salt.
- Avoid salty foods such as processed meat and fish, pickles, soy sauce, salted nuts, chips and other snack foods.
- Fresh fruits and vegetables have low sodium content, but avoid adding salt to vegetables during preparation.
- Nearly all products that you buy at the store have a "Nutritional Information" label on the package. Before you buy or use a product, check the sodium content **and** the portion size information.
- Check for hidden sources of salt. Eating in restaurants causes difficulty as the majority of restaurant food is salted. Prepared meats and meat containing brine or a flavoring solution often have high salt contents.

Nutrition Facts

Serving Size 1/2 cup (115g)
Servings Per Container About 4

Amount Per Serving	
Calories 250	**Calories from Fat** 130
	% Daily Value*
Total Fat 14g	22%
Saturated Fat 9g	45%
Cholesterol 55mg	18%
Sodium 75mg	3%
Total Carbohydrate 26g	9%
Dietary Fiber 0g	0%
Sugars 26g	
Protein 4g	
Vitamin A 10%	Vitamin C 0%
Calcium 10%	Iron 0%

* Percent Daily Values are based on a 2,000 calorie diet