

Component 2: The Culture of Health Care

Unit 4: Health care processes and decision making Lecture 2

This material was developed by Oregon Health & Science University, funded by the Department of Health and Human Services, Office of the National Coordinator for Health Information Technology under Award Number H260CC000015.

My ankles are swollen

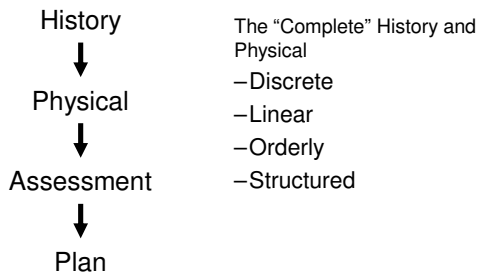
- Example case: a man who came to the clinic because of ankle swelling. The clinic assistant says "blood pressure two-twenty-five over one-forty" as she brings in a man with his shoes untied and loosened, with ankles bulging over the top. He looks healthy enough, but he's a little pale. He says he's a little short of breath after walking in from the parking lot, but his lungs sound clear, and he's only breathing twelve times a minute.
- "Do you smoke?" you say. "Used to - I quit three years ago." He says he's been gaining weight lately, and his clothes are fitting tight. You check his heart, which has an S4 gallop, but no murmur. You ask about his clothes - first his shoes, then later his pants felt too tight. You check his abdomen, which shows no tenderness, masses, or enlarged organs. Then he recalls that he was on medication for blood pressure a few years back, but stopped taking it because he felt 'slowed down'. You check his pulse, which is 120, and notice a two-plus pitting to the mid shin. "Ever been sick before?" you ask. No, never in all my thirty-nine years, except once when I got a rash from aspirin. Oh yeah, and to have my tonsils out."

Component 2/Unit 4-2

Health IT Workforce Curriculum
Version 2.0/Spring 2011

2

Clinical Process: The Myth



Component 2/Unit 4-2

Health IT Workforce Curriculum
Version 2.0/Spring 2011

3

Clinical Process: The Reality

New hypotheses New information

- Symptoms and signs gathered constantly
- Iterative hypothesis testing, data gathering
- Narrowing cognitive space of possibilities
- Ends when sufficiently certain for action
 - Elstein, 1978
 - Gorman 1998

Component 2/Unit 4-2 Health IT Workforce Curriculum Version 2.0/Spring 2011 4

“Disease hides its secrets in a casual parenthesis”

- Getting the story
 - Open ended questions
 - Enabling the person to tell their story
 - Including/excluding family, others
- Filling in the details
 - Closed ended questions
 - Comprehensive checklists, other sources
- How the tools affect the process
- Collection ≠ Documentation

Component 2/Unit 4-2 Health IT Workforce Curriculum Version 2.0/Spring 2011 5

Step Two analyzing findings

Part 1: Giving Structure to the Data

Component 2/Unit 4-2 Health IT Workforce Curriculum Version 2.0/Spring 2011 6

History and Physical Structure

“Every medical student should learn to do a complete History and Physical, and then *never do one.*”

- David Sackett

Component 2/Unit 4-2 Health IT Workforce Curriculum
Version 2.0/Spring 2011 7

Structured Data Organization

- Source and ID
- Chief Complaint
- Present Illness
- Past History
 - allergies/adverse rxns
 - medications/treatments
 - past medical problems
 - past surgeries
 - menstrual/obstetric Hx
 - vaccinations/preventive
- Social & Family History
- Review of Systems
- Physical Examination
 - Appearance/vitals/skin
 - HEENT/Neck
 - Lungs/Heart
 - Abdomen/Genitalia
 - Extremities/Back
 - Neurologic
- Ancillary data

Component 2/Unit 4-2 Health IT Workforce Curriculum
Version 2.0/Spring 2011 8

Select the Important Information

The clinic assistant says “blood pressure 225 over 140” as she brings in a man whose shoes are untied and loosened, with ankles bulging over the top. He looks healthy enough, but a little pale. He says he’s a little short of breath after walking in from the parking lot, but his lungs sound clear, and he’s only breathing 12 times a minute. “Do you smoke?” you say. “Used to - I quit three years ago.” He says he’s been gaining weight lately, and his clothes are fitting tight. You check his heart, which has an S4 gallop, but no murmur. You ask about his clothes: first his shoes, later his pants felt too tight. You check his abdomen, which shows no tenderness, masses, or enlarged organs. Then he recalls he was on medication for blood pressure a few years back, but stopped taking it ‘cause he felt ‘slowed down’. You check his pulse, it’s 120, and notice 2+ pitting to mid shin. “Ever been sick before?” you ask. No, never in all my 39 years, except once when I got a rash from aspirin.” “Oh yeah, and to have my tonsils out.”

Component 2/Unit 4-2 Health IT Workforce Curriculum
Version 2.0/Spring 2011 9

Give Structure to the Data

History

- HPI progressive wt gain, shoes then pants fit tight exertional dyspnea,
- ALL ASA: rash; HTN Rx: 'slowed me down'
- PMH ? HTN on ?Tx
- SOC quit smoking
- SURG tonsillectomy

Physical

- GEN pale, healthy M
- VS 225/140 120 12
- HEENT
- NECK
- LUNGS clear
- HEART S4, no M
- ABD nontender; no HSM
- EXT 2+ pitting to mid shin

Step 2 analyzing findings

Part 2: Finding Patterns and Meaning in the Data

Hierarchy for Clinical Data

Global Complex	<i>syndromes commonly seen together</i>
Diseases	<i>specific conditions that cause syndromes</i>
Syndromes	<i>constellation of symptoms and signs</i>
Facets	<i>groups of findings related by pathophysiology</i>
Findings	<i>subset that is relevant to his care</i>
Observations (may fit one Dx, multiple Dx, or no Dx)	<i>everything we noticed and noted (the complete history and physical)</i>
Empirium	<i>description of clinic, staff, light, sound, etc.</i>

Man with Edema

Global Complex	<i>none so far</i>
Diseases	<i>HTN? alcohol? ischemic HD? toxin?</i>
Syndromes	<i>Heart failure? Anemia?</i>
Facets	<i>weight gain+edema; 225/140 + S4; pallor; tachycardia</i>
Findings	<i>weight gain, DOE, Hx HTN, smoker, pallor, clear lungs, S4, normal abdomen, edema</i>
Observations	HPI progressive wt gain, shoes then pants fit tight exertional dyspnea, ALL ASA: rash; HTN Rx: 'slowed me down' PMH ? HTN on ?Tx SOC quit smoking SURG tonsillectomy GEN pale, healthy M VS 225/140 120 12 LUNGS clear HEART S4, no M ABD nontender; no HSM EXT 2+ pitting to mid shin
Empirium	<i>clinic environment, staff, distance to parking lot</i>

Component 2/Unit 4-2

Health IT Workforce Curriculum
Version 2.0/Spring 2011

13

Create a problem list

- weight gain + edema
- exertional dyspnea but clear lungs
- pallor
- high BP + Hx HTN
- tachycardia
- S4 gallop
- RFs for CAD
- ex smoker

To-Do list for patient care

- GROUPING
 - Group related items
 - Don't group if unsure
- INCLUDE
 - Items that need attention or action
 - Tonsils? Smoking? Male
- EXPRESSION
 - at level of understanding but no more
 - problems with persistence, precision of coding

Component 2/Unit 4-2

Health IT Workforce Curriculum
Version 2.0/Spring 2011

14
