Component 2/Unit 4a/Lecture 2

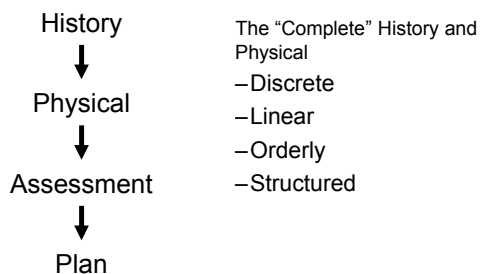Step One: Gathering Data

My ankles are swollen

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."

Clinical Process: The Myth

History

↓

Physical

↓

Assessment

↓

Plan

The "Complete" History and Physical
– Discrete
– Linear
– Orderly
– Structured

Clinical Process: The Reality

Symptoms & Signs

New hypotheses

New information

Working Diagnosis

Plan

- 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

"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

Step Two analyzing findings

Part 1: Giving Structure to the Data

History and Physical Structure

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

- David Sackett

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

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."

↕Give Structure to the Data

History	Physical
• HPI progressive wt gain, shoes then pants fit tight exertional dyspnea,	• GEN pale, healthy M
	• VS 225/140 120 12
• ALL ASA: rash; HTN Rx: 'slowed me down'	• HEENT
	• NECK
• PMH ? HTN on ?Tx	• LUNGS clear
	• HEART S4, no M
• SOC quit smoking	• ABD nontender; no HSM
• SURG tonsillectomy	• 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	*syndromes commonly seen together*
Diseases	*specific conditions that cause syndromes*
Syndromes	*constellation of symptoms and signs*
Facets	*groups of findings related by pathophysiology*
Findings	*subset that is relevant to his care*
Observations (may fit one Dx, multiple Dx, or no Dx)	*everything we noticed and noted (the complete history and physical)*
Empirium	*description of clinic, staff, light, sound, etc.*

Man with Edema

Global Complex	*none so far*
Diseases	*HTN? alcohol? ischemic HD? toxin?*
Syndromes	*Heart failure? Anemia?*
Facets	**weight gain+edema**; *225/140 + S4; pallor; tachycardia*
Findings	*weight gain, DOE, Hx HTN, smoker, pallor, clear lungs, S4, normal abdomen, edema*
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** | *clinic environment, staff, distance to parking lot* |

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