ADULT ADHD

S. Marc Silling, PhD
Coordinator of Testing/Psychologist
Counseling Center - University of Akron
ADHD and ODD Problems

- ADHD accepted as DX resulting in services in this state (only) since 1997
- 11,000,000 persons in Ohio
- ADHD DX rate about 4%
- 440,000 Ohio residents eligible for ODD services
- Another half million easily have ADHD tacked onto other mental disorder lists
- You can become an ADHD service agency
- What was your mission?
My Learning Objectives Today

- What is ADHD
- What are the problems with ADHD diagnoses you receive
- How is an effective assessment done
- What sort of requirements can be used to minimize unwarranted services
- The 440,000 persons with ADHD will still be a problem for you \((440,000 \times 25,000/yr = 11,000,000,000)\)
  - But not the other half million unwarranted clients
Professional Association Helps

☐ Persons who work with ADHD professionally
☐ Includes authors of papers I liked
  ☐ Mix professional viewpoints via other disciplines
  ☐ Feedback (look at my inventions, read my reports)
  ☐ Creativity (respond with new ideas)
☐ Some of these slides were inserted by one of the psychiatrists in our interest group
  ☐ Write me for medication slides from psychiatrists
☐ Send me your email and you are in
☐ smarc@uakron.edu
Materials that I will email you

- Protocols (both mine and Eric Heiligenstein, MD)
- Barkley Nine Items (patient and observer versions)
- Impairment worksheet
- HCL-32 Mania Questionnaire, Childhood Bi-Polar chart
- Patient Health Questionnaire - R (J. Spitzer, MD)
  - Formal training version
  - Shorter no instructions version with added mania item
- Interview Questionnaires (Adapted from Massachusetts Medical Center Adult ADHD Clinic Structured Protocol)
  - Patient version
  - Parent version (E. Heiligenstein, MD)
- PowerPoint slides
The reason for this talk

- ADHD is sufficient for DD services
  - Strange that this mental disorder works but none of the other ones do not.
    - Bi-polar doesn’t work

- Easy to obtain the DX

- ADHD clients can suck all the funds out of your system (Drug addiction plus ADHD = Services)

- My assistant’s son: Smith-Lemli-Opitz, IQ 32
  - Money available for his services?
ADHD DSM-IV Diagnostic Criteria

- Developed for children
- Not a lot of science in the criteria
  - Age 7 criteria was simply settled by vote
- No age or sex adjustment (!)
  - Boys different from girls
  - 6 year old clients different from 37 year old clients
- Symptoms common
  - Circle “Inattentive” symptoms that are true for you on the handout
33 year old patient arrives wanting diagnosis of ADHD having never been diagnosed with this disorder

Completes interview and questionnaire(s) checking most of the items for ADHD

Physician DX: ADHD, proscribes stimulant medication and recommends coaching/counseling

Patient comes back saying the stimulant helped

Patient wants a letter verifying that he/she has ADHD for Office of Developmental Disabilities which is done

Everybody is happy – aren’t they?
Why Such An Increase in ADHD Assessments?

- Enormous increase in awareness
- ADHD is not considered by many to be a mental illness
- Dx is effective for procuring performance enhancing medication
- Effective for procuring accommodations/services
  - OCR (federal and state) may attack an institution
  - DD has it written into law that ADHD works
- Avoids other unpleasant sounding diagnostic terms
Everybody Has It

  - 224 students from Counseling/Psychiatry
  - 180 students from Health Center
- Brown Attention Deficit Disorder Scales – Adult
  - Cut off 55 (Clinically significant/high risk range)
- Health Center students 21%
- Counseling/Psychiatry 66.7%
- Actual rate was estimated at 4%
- Mean DSM-IV for “normals” is 3 of 6 symptoms
Success in de-stigmatizing mental illness (well ADHD anyway)
Problems with Over-diagnosis

“Let’s put a smile on that face”
Patients: “We’re ready to believe you”
Ghostbusters TV Ad

- Professional labeling, particularly with a person seeking the label tends to be long lasting or permanent
- Attribution for problems is then made to the label
  - I can’t do math because I’m ADD
  - I can’t gain employment because I am ADD
- Self efficacy suffers
  - (I need services because I am defective)
- Real issues (psychiatric disorders, self management skills, acceptance of ones limitations) ignored
- Other problems: Drug distribution, unwarranted accommodations and services produces a backlash, others induced to get the Dx
ADHD: Effective for Gaining Services
(I’m not making this up)

- Graduating college student who wanted special set-aside employment for persons with disabilities
- Four years of accommodations yet testing did not demonstrate any sort of disorder
  - I refused to write any sort of documentation letter
- Went to primary care physician and got ADHD DX
- Now gainfully employed in job set aside for disabled.
- May also be eligible for DD services
“I’m studying as hard as I can but I just don’t see results. I’m in the bottom quarter of my class.”

I can’t “focus” or “concentrate” any more – “I must be ADD.”

Patient doesn’t see the real issue:
- Student is competing with a class of valedictorians
- Self esteem rests on being in top 10%, causing patient to rate him/herself as a failure with resulting depression and anxiety
- Concentration problems are somatic outcome of overall stress, depression and anxiety

Students seek the Dx of ADHD as a means to performance enhancing medication, possible accommodations, and an acceptable explanation
Stimulant Abuse in Young Adults Fueled by Sharing of Prescription Medication

- 27% of ADHD medical users overused stimulant prescription
- ADHD stimulants: overall 61.7% diversion rate (!)
- ADHD amphetamine: 70.5% diversion rate (!)
- Of persons who abuse stimulants, 78% obtained from friends
- 9.3% of prescriptions are sold
- Checked with my son and daughter who were/are college students who lived in dorms
  - “ADHD medication as available as candy”

Percent of patients who diverted ADHD Medication
One or more times

Table 2. Prescription and diversion rates for the top three most prescribed ADHD, analgesics, other psychotropic, asthma/allergy, and other non-psychotropic medications among 483 college students prescribed a medication.

<table>
<thead>
<tr>
<th>Medication</th>
<th>Number of Individuals with a prescription for this medication</th>
<th>Weighted Percent of individuals in the class population prescribed this medication (N=2,893)</th>
<th>Number (%) of individuals who diverted this medication</th>
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<td>Amphetamine/dextroamphetamine</td>
<td>44</td>
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<td>Other</td>
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<td><strong>Asthma/Allergy Medication</strong></td>
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<td>Albuterol</td>
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<td>8.2%&lt;sub&gt;wr&lt;/sub&gt;</td>
<td>14 (12.7)</td>
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</table>
Motives of Nonmedical Use: Prescription Stimulant Medications

- Concentrate: Women (n=165) 69%, Men (n=217) 63%, 
- Helps me study: Women (n=165) 67%, Men (n=217) 67%, 
- Increases my alertness: Women (n=165) 59%, Men (n=217) 39%, 
- To get high: Women (n=165) 29%, Men (n=217) 33%, 
- Experimentation: Women (n=165) 24%, Men (n=217) 35%, 
- Helps me lose weight: Women (n=165) 18%, Men (n=217) 3%, 
- It's safer than street drugs: Women (n=165) 5%, Men (n=217) 5%, 
- Counteract effects of AOD: Women (n=165) 2%, Men (n=217) 7%


Slide courtesy Eric Heiligenstein, M.D.
Clinical Director, Psychiatry
University Health Services
University of Wisconsin-Madison
ADHD Assessments are Difficult

A lot of background noise

Motivations of the patient to look a certain way

You will be attempting to make a diagnosis when most of the time all the data fails to line up neatly.
Difficulty Applying DSM-IV ADHD Criteria to Adults

- Developed exclusively for children
  - Run around the room?
- No guidelines for defining impairment, especially in adult domains
  - Important diagnostic markers (driving & employment) are not addressed
- Sub-typing has little merit for adults
  - Combined/hyperactive children become Inattentive adults (no brakes, not excessive motors)
Traffic Violations and MVA Among Young Adults With ADHD

Subjects Responding Yes (%)

- Drove Before Licensed (P = .003)
- ≥12 Traffic Citations (P = .001)
- ≥5 Speeding Citations (P = .001)
- License Suspended or Revoked (P = .002)
- ≥3 Vehicular Crashes (P = .007)

ADHD (n = 105)
Control (n = 64)

Would you say this is true for you?

☐ I have been depressed to the degree that I have a mood disorder

☐ If you say yes to the above question due to your disability you get:
  - $1000/month for life
  - Attendant that will clean your house daily
  - Free tuition to any education you seek

☐ Let me ask that question again
Can Persons Fake ADHD?

- Three groups: honest normals, fakers, ADHD
- On self report instrument (CAARS) as well as WJ-III Reading Fluency and WAIS-III Processing Speed, fakers could not be discerned from normals.
- Fakers did have more dysfunctional mean scores than the ADHD group
  - Persons wanting the DX check everything
My First Malingering/Role Playing Test
The HCL-32

- Suggested to me to rule out mania
- Items look like hyperactivity
- A score of 16 was supposed to indicate a likelihood of mania (.8 sensitivity, .5 specificity)
- Almost all persons coming in for an ADHD assessment would check 20 or more of the items
- Sign of role playing – checking everything
Malingering Tests

- Real memory items interspersed with items almost everyone can do
  - Dog          Cat
  - Up           Down
  - Salt         Pepper

- Test item:
  - Dog?
  - Dog?          Cat or Salamander?

- If patient’s score is five standard deviations below demented 80 year old patients, I suspect “suboptimal effort”
Memory Impaired Patient
(TBI, on disability)

Green's Word Memory Test

PATIENT: Cognos, Mike  
EDUCATION: 2 Years College  
AGE: 41  GENDER: Male  
Administered on 4/7/2009

Patient Scores

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Comparative Groups - Custom Set

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Graduate student seeking ADHD diagnosis with no previous ADHD history

Green's Word Memory Test

PATIENT: gradstudent, Fred
AGE: 36  GENDER: Male
Administered on 2/25/2009

EDUCATION: Masters Degree

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<th></th>
<th>IR</th>
<th>DR</th>
<th>CNS</th>
<th>MC</th>
<th>PA</th>
<th>FR</th>
<th>LDFR</th>
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</thead>
<tbody>
<tr>
<td>Mentally retarded adults: pass or fail German WMT (Dr R. Brockhaus)</td>
<td>Mean: 93.3</td>
<td>96.3</td>
<td>91.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard Deviation:</td>
<td>1.2</td>
<td>4.8</td>
<td>6.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient Z-Score:</td>
<td>-11.1</td>
<td>-2.9</td>
<td>-2.8</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Weighted Average Z-Score: 8.44 Mean Validity: -5.57 Mean Memory: 0.00</td>
<td>Validity minus Memory: -5.57</td>
<td></td>
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</tbody>
</table>
Malingering Tests Applied to ADHD Assessments

  - 47.6% failure rate for ADHD assessments
  - 15% failure rate for LD assessments

- Suhr et al. (2008), Archives of Clinical Neuropsychology, 23, 521-530
  - 31% failure rate ADHD
  - Self report and neuropsychological tools not useful for detecting malingering
Other easily faked tests

- Continuous Performance Tests (CPT)
  - Normals do the best
  - ADHD do worse
    - Problem is the test is not specific to ADHD
    - Depressed persons would do worse
  - ADHD malingerers will do the worst
    - So a very low score suggests faking, not ADHD
- Learning Disorder tests (15% malingering test failure)
  - R/O with knowledge of syndromes
    - sight reading = spelling and fluency
Previous Dubious Diagnosis of ADHD

- Child taken to primary care physician due to behavioral problems
- Checklist is filled out by the parent = ADHD DX
- Stimulant medication is proscribed and child/family counseling
- Child seems to do somewhat better, especially after a 504 plan (special education programming) is started
- Therefore it must have been ADHD (Dx by medication trial)
- The diagnosis is incorporated into the child’s identity
Sympathetic Professionals

- Patient is the person paying the bill
- Bill can be quite large (like $2000)
- Tendency to want to give the patient what he or she paid for
- Patient wants to have an answer that provides services
- Psychologist: no harm in advocating for his/her client
  - ODD seen as infinite financial source
- Dx with little supporting documentation
  - ADHD is diagnosed by checklist and symptom interview
  - ADHD diagnosed with a plethora of neuropsychology tests
Sample report

- Report by reputable hospital signed by a psychologist who was credentialed by the American Board of Professional Psychology in neuropsychology (highest level of credential)
- No testing related to ADHD
- Performance exams only tests
- **Note no test scores are substantially below average**
- Yet multiple diagnoses, one of which is ADHD
- We tested this person and could find nothing wrong with her at all
  - DX was “parents need daughter to be sick in order to get services”
- You could get this report along with demand for services
Summary of Difficulties

- De-stigmatized and popular
- More acceptable than other psychiatric disorders
  - Symptoms of psychiatric disorders look the same
- More acceptable than lack of talent, low effort
- Persons come to the assessment already sure they have it and only want confirmation
- Secondary gains via accommodations
- Access to performance enhancing stimulants
- Tests are easily faked (or role played)
  - Many patients are faking or role playing
- Previous diagnosis based on meager evidence
Differential Diagnosis ADHD

Separating ADHD From All the Background Noise
What is it you are looking for?

Barkley’s Model

- Behavioral Inhibition disorder
- Four cognitive deficits in four domains
  - Time perspective
  - Self talk and development of rules
  - Emotional regulation
  - Creative problem solving
- Medication treats the inhibition disorder
- Coaching treats the cognitive deficits
- Leaves a trail of wreckage
Note that by definition persons grow out of it, never into it. In 59% of documented ADHD cases the patients grow out of it.

Barkley, Murphy, & Fischer (2008) Milwaukee study
Traditional Diagnostic Approaches
Problematic

- Specificity of checklists and tests with scales exaggerated due to secondary gain issues
- Self report should always be used with caution
- Patients will come in role playing ADHD since they already are sure that is the problem
- Patients will be malingering for secondary gain
- A minority of persons presenting for an ADHD assessment will in fact have ADHD
  - In our office about 2/10
Assessment Focus

- Persons don’t grow into this diagnosis, they grow out of it
  - Therefore there will be a history of impairment
- Instead of symptoms, move the assessment focus to historical impairment
  - Relative to the general population
  - “I’m having real problems keeping up with the other Olympic marathon runners”
- Admittedly this is a different approach
  - Diagnosis of adult disorder through retrospective diagnosis of a childhood disorder via impairment
Impairment

- Symptoms are behavioral expressions of a disorder
  - Distractible, inability to sustain effort, impulsive
- Impairments are the consequences that result from symptoms
  - Failing the course, damaging relationships, job termination
- Relative to the general population not other medical, law, college students
Impairment: Adult ADHD

Barkley, Murphy, & Fischer (2008) UMASS study
Impairment Checklist

- **Occupation**
  - Difficulties at work, keeping jobs

- **Education**
  - Failure in educational programs

- **Social/peers**
  - Damage relationships via impulsive acts

- **Dating/love relationships**
  - Difficulty in sustaining relationships

- **Home life**
  - Chaos and disorganization
Impairment Increased by Co-morbidity Adults With ADHD

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Present Now</th>
<th>Present Ever</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generalized Anxiety</td>
<td>23%</td>
<td>25%</td>
</tr>
<tr>
<td>Dysthymia</td>
<td>37%</td>
<td>39%</td>
</tr>
<tr>
<td>Major Depressive Disorder</td>
<td>19%</td>
<td>52%</td>
</tr>
<tr>
<td>Alcohol Use Disorder</td>
<td>26%</td>
<td>53%</td>
</tr>
<tr>
<td>Cannabis Disorder</td>
<td>21%</td>
<td>49%</td>
</tr>
<tr>
<td>Bi-Polar Disorder</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>OCD</td>
<td>3%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Barkley, Murphy, & Fischer (2008) UMASS study
Assessment Part One
Symptoms
Best DSM-IV Items for Adults

- 18 DSM-IV items: Only one item accounts for almost all the predictive power of the item set for adults
  - Often easily distracted by extraneous stimuli
- For all 18 items, four (all in-attentiveness) were most predictive (95% correct classification)
  - Attention to details
  - Difficulty organizing tasks
  - Loses things necessary for tasks
  - Is easily distracted
- These four items reflect executive functioning and working memory

Barkley, Murphy, & Fischer (2008) UMASS study
Adult Symptoms
Barkley et al. (2008) UMASS Study

- Often distracted
- Makes decisions impulsively
- Difficulty stopping activities when necessary
- Starts a project without reading directions
- Poor follow-through on promises
- Trouble doing thing in the proper order
- Drives a motor vehicle faster than normal
- Difficulty sustaining attention on tasks
- Often has difficulty organizing tasks
Nine Item Suggested Cutoffs

- Four
  - Rules out 99% of control group (.99 specific)
  - Captures 94% of ADHD (.94 sensitivity)
  - But also captures 56% of clinical group (.44 spec)

- Six – Barkley et al. suggested cutoff
  - .99 specific relative to control group
  - .92 sensitivity ADHD
  - .47 clinical group specificity

- From UMASS study – not cross validated
Scaled Symptoms

Connors Adult ADHD Rating Scales (CAARS)

- Individual and Observer versions
- Sex and age adjusted
- Four factor scores
  - Inattention/Memory Problems
  - Impulsivity/Emotional Lability
  - Hyperactivity/Restlessness
  - Problems with Self-Concept
- DSM-IV items (ADD, Hyperactive, Combined)
- Index score
CAARS

- Sensitivity/specificity .71/.75 (what’s wrong here?)
- Interview patient and parents about the items
- Note how patient may check everything on DSM-IV but factor scales and the index scores are not elevated.
- Value of the test is not for detection of ADHD, but for low factor and index scores to rule out ADHD.
Sample Conners

- Client tried on Ritalin as a child for ADHD
- Claims ADHD symptoms and wants medication (like room mates get)
  - Client checks six on Barkley’s checklist
  - Client checks almost all the DSM-IV items
- Conners useful for dispelling ADHD DX
  - Note how DSM-IV items are elevated but factor and index scores are not
- Also no history of recent impairment
Interviews: The core of the assessment

- Interview the patient as well as significant others
- My opinion: Interview data largely trumps test data
- Important: In your initial interview don’t correct the patient’s understanding of ADHD
  - Patient comes in and says his ADHD started when he was 21. I tell patient that this is not symptomatic of ADHD, that it starts in childhood.
  - Patient then fills out an interview questionnaire and puts the onset of the disorder as 7, not 21.
    - 21 was initially checked and then erased
Interview forms

- Interview the patient for history of impairment
- Interview parent(s) and current partner
  - Shortcut #1: Have patient complete the Massachusetts Medical Center Adult ADHD Clinic Structured Protocol (converted to questionnaire)
  - Shortcut #2 Have parent fill out observer version
  - Shortcut #3 Have others in current family, friends, etc. fill out Nine Item Observer forms
- Interview everyone that fills out a form if possible
- You may want to mail interview forms to observers
  - Malingers may fill it out themselves
Rule Out/In Other Explanations

- Other diagnoses that mimic ADHD
  - Mood disorder, anxiety, bi-polar I, II, substance use disorders
- Other diagnoses that are co-morbid with ADHD
  - MDD, substance abuse common
Rule Out Other Explanations

- Patient Health Questionnaire (Spitzer, et al.)
  - Designed for primary care physicians
    - Easy to administer and score
    - Very high specificity for disorders (.95 and above)
  - Covers somatic complaints, mood disorder, GAD, panic, substance abuse, and eating disorders.
  - Added better GAD section, I added mania question.
- Patients won’t check these items unless true
- When they do, allows quick diagnosis of either co-morbid disorder, or better explanation
Rule Out Other Explanations 2

- Personality test with normed scales
  - MMPI-2
  - Personality Assessment Inventory
    - Cheaper, much shorter, content related items
- Interview for other mental disorders
- Medical evaluation
- Learning disorder evaluation (reading)
- Central Auditory Processing Assessment
ADHD Assessment Summary

- Symptoms (Barkley items, DSM-IV)
- Scale symptoms (CAARS Self and Observer)
- Impairment (Structured interviews)
- Rule out malingering or role playing
  - Primarily via interviews for impairment
  - May also include malingering instrument
- Discern co-morbid or better psychological explanations
  - PHQ, interviews, MMPI-2 or PAI
Suggested ADHD Packet

- For the office
  - PHQ, Barkley Nine Items, PAI, HCL-32
  - UMASS Interview form
  - CAARS-I

- Envelope to take to parents/spouse (or mail it)
  - CAARS-O
  - UMASS Interview form – observer version (one for each parent sometimes)
  - Barkley Nine Items – observer version
Quick Assessment

- Barkley Nine Items
- Patient Health Questionnaire
- Impairment Interview (form)
- If significant do more thorough assessment
What are reasonable accommodations?

- No evidence that persons with ADHD need extra time
  - Per conversation with Russ Barkley
  - I have done “adverse impact” testing (LD testing in our waiting room) and never found impairment due to time

- Recording classes helpful

- Distraction reduced testing environment helpful
Treatment

- Referral for medication management (beh inhib management)
  - Psychiatrist (also for a second opinion about DX)
  - Primary care physicians (not for a second opinion)
    - Have an established relationship (know limits - cyclo+ADHD)
    - Good evidence based (history, behavior, tests) report
    - Periodic updates
  - Stimulants, non-stimulating, off label medications
  - Management of co-morbid mood/anxiety disorder

- Coaching/Counseling (cognitive structures)
  - Point of performance interventions (structure)
  - Co-morbid conditions

- Self help materials (workbooks)
Evaluating Reports

- Have published standards of what constitutes evidence for a disorder
  - You should be able to hand this to anyone applying for services

- If a person applies for services with an unacceptable report give him or her the “form” to be completed.
  - Respond in writing why the report didn’t effectively support the conclusion
Components of a Good Report

- Information actually related to ADHD
  - Neuropsychology tests, intelligence tests are not demonstrative of ADHD
  - Symptoms and related impairment.

- Three components
  - Historical information that is validated (IEP, ETR, reports from school)
  - Observation and interview information in the present
  - Test data (CAARS, Barkley, PHQ, PAI, etc.)
Sample Requirement Form

- Professional diagnostician completes the form
- Attaches report that addresses all the required information of the form
- If not, then respond in writing as to what was missing or unclear
- It is the responsibility of the applicant to provide convincing evidence of disabling condition
- Persons without evidence often stop here
Hire your own assessment expert

- Court experience very helpful
  - Knows how to write evidence based reports
    - History, behavior, test data construction
  - Is not “scared off” by threat of litigation
- Knows the content area well
  - Can provide differential diagnosis
- Has extensive experience in diagnostics
  - Writes diagnostic reports for a living
- This psychologist works for you
PDF files to examine

- ABPP Neuropsych report
- Bipolar patient coming for ADHD assessment
- Bipolar child ADHD assessment (Per Dr. Waltman)
- CAARS (ADHD, faking ADHD, normal)
  - Note how they all look the same
- Frank (ADHD and MDD)
- Law student seeking DX for medication
- Mother with children and previous trial on medication seeking ADHD diagnosis
Buckman’s Six Steps
Delivering Difficult News

- Pacing important
- Ask what the patient thinks
- Ask the patient how he/she wants news
  - Honest clarity?
  - Proceed by invitation
- Tell the patient what you think in chunks
- Process patient feelings and thoughts
- Plan
- Who will the patient see next
Questions?

- My email: smarc@Uakron.edu
- Phone: 330-972-7084