# **Morning Report**

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Dr. Mahsa shakour

# Objectives

### Must

- **₩** What
- **\*** Why
- **#** Who
- **\*** When
- \* where
- **∺** How
- Which(matter)

### Is

**#** History

**#** Challenges

- **\*** Lecture
- **■** Question
- **\*** Lecture
- **#** Question
- \* Articles Research
- **\*** summarize

# The term "morning report"

# is used to describe case-based conferences

includes resident reports, morning or housestaff conferences, and morning sessions

**#** Excludes:

work rounds or teaching rounds

- **\*** The format varies
- but usually consists of a group of medical students and residents (i.e. the "learners")
- sitting around a table
- with a faculty member or chief resident (i.e. the "teacher") functioning as facilitator.

. . .

# The content and time of the round and participants vary between institutions.

\* The case is discussed in the Socratic manner

# History

Origins of MR are somewhat obscure!

(Schiffman, 1996)

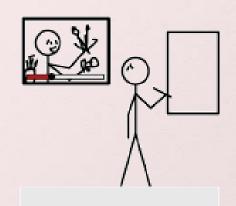


# please

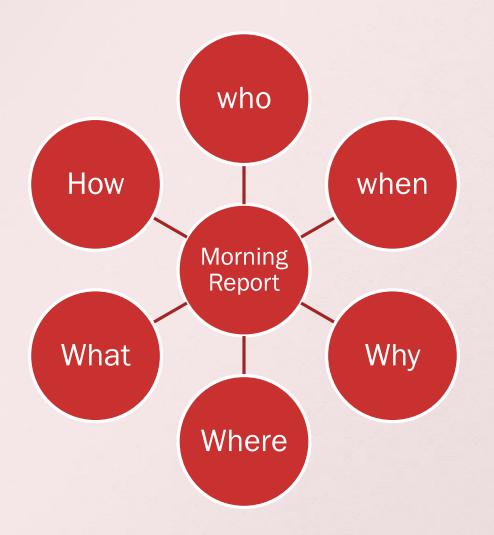
Draw a schematic morning report

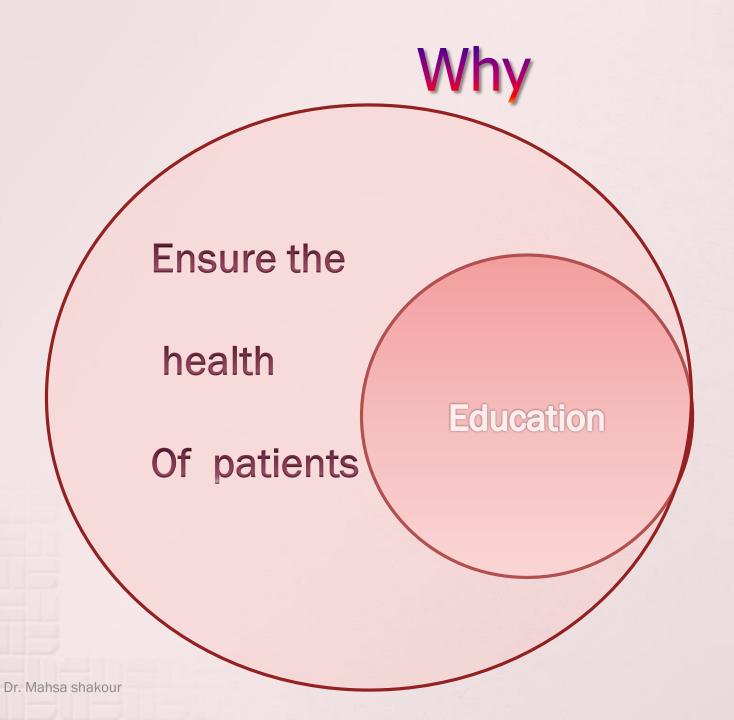
\* And determine a role of persons on drawing

#### 1 minutes









# Why

- **Education**
- Evaluating residents
- Evaluating quality of services
- Detecting adverse events
- Detecting social interaction
- an important case-oriented teaching session
- allow[ed] the chief to keep tabs on medical services



#### Most of the articles

Internal medicine residency programs

Pediatrics, Family Medicine and Neurology

# The organization of morning report in five subheadings:

- # frequency
- **#** time
- **#** Duration

- **\*** Participation
- leadership

case selection and presentation

record keeping

patient follow up

(ZUBAIR AMIN, 2000)

### When

#### May occur:



- At the beginning of the workday
- \* After or in the middle of patient care rounds

### When

- # Five times or more a week (80%)
- Less than three times a week (Only a handful)

- Report usually began before 9 AM
- ★ Afternoon (4%)
- # for an hour

### Who



- participants in the round vary, usually include:
- housestaff
- \* the attending physicians on service
- \* the chief medical resident

\* other attendees

### Who

- The mix of participants and leaders varied greatly across programs.
- The chief of medicine or the director of medical education (>50%)
- Third-year residents (the most)
- # first-year residents(~ 60%)
- Generalist physicians
- internal medicine residents prefer
- **Pharmacists**
- **Librarians**

(Amin et al., 2000)



### The person leading morning report:

either a faculty member(70%)

# or a chief resident (30%)

### What

#### **\* Case Selection and Presentation:**



- most cases (88%) were those of inpatients
- cases whose diagnosis changed during hospitalization
- **#** Unorthodox methods:
- cases one to two days in advance
- of simple cases at the beginning of the academic year and more complex ones later in the year
- prior to discharge

(Amin et al., 2000)

#### **\*\* Record Keeping for:**

- # educational purposes, such as the evaluation of content coverage and patient follow ups
- # data sources for research
- # for patient follow up
- patient distribution among house staff
- \* residents' evaluation

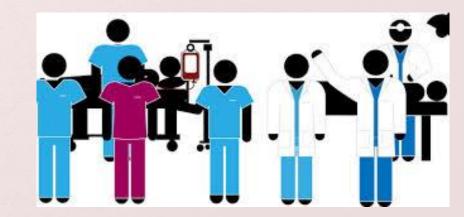
### Where

Its place is well established in most teaching hospitals

- -

Inpatient

**#** Outpatient



### How

Instructional method used during morning report:

Case-based

2. PBL (Problem based learning)

3. EBM



# Case-based presentation

- most frequent
- # followed by discussion

- + innovative methods like:
- photographic materials
- learner-centered learning approaches

# PBL (Problem based learning)

\* to improve their problem-solving and data gathering skills



a four phase (similar to evidence-based medicine)
morning report to foster active learning

(Amin et al., 2000)

### **Process**

Assigning questions in the previous day



**Discussion** of assigned questions



1- Residents presented all admission cases



2-The chief resident used didactic methods to **emphasize** important teaching issues



3- The participants Discuss in detail



4- formulating questions and assigning them to residents for presentation the next day

(ZUBAIR AMIN, 2000)

Dr. Mahsa shako

#### Evidence-based 29 In patient

#### Evidence-based Morning Report for Inpatient Pediatrics Rotations

Alan Schwartz, PhD, Jordan Hupert, MD, Arthur S. Elstein, PhD, and Peter Noronha, MD

#### ABSTRACT

The authors describe a patientcentered method for teaching evidence-based medicine that is part of the inpatient morning report for pediatrics residents at the University of Illinois at Chicago. With library support, residents search for evidence to answer their own questions about patients, and present it at morning report

Acad. Med. 2000;75:1229.

The pediatrics residency at University of Illinois at Chicago College of Medicine includes month-long inpatient rotations for residents in their first and third years, and an eight-week rotation for medical students. A daily hour-long morning report teaching conference focused on case discussions is an important component of these rotations.

For the last 30 months, we have also instituted evidence-based morning report sessions once per week, with the goal of bringing the knowledge, skills, and attitudes required to practice evidence-based medicine1 (EBM) to residents, clerks, and Dr. Mahsa shakou attending physicians in a way that directly relates to their patients and that minimally intrudes on the already busy the Library of Health Sciences participate. In addition, the head of the Department of Pediatrics and the inpatient medical director participate in these conferences, and their presence lends EBM sessions strong legitimacy.

The first week's session acquaints learners with the PICO (patient, intervention, comparison, outcome) method for formulating an answerable clinical question and introduces them to library staff. During each of the following weeks, a different resident-student team (of about four) is responsible for identifying a current patient case about which they have a question, formulating the question using PICO, meeting with the librarian to perform a literature search, and selecting an article that they believe best answers their question. They then present the details of their research process, a critical appraisal of the article, and a description of its application to the patient's case. Teams are aided in their interpretation of statistical results by two locally developed online calculators for diagnostic and therapeutic interventions.2 The discussion of article methods and results provides many "teachable moments" for concepts in research design and interpretation of statistical analyses.

Residents and students have reported that they enjoy the sessions, particularly because of their patient focus. Faculty

A formal evaluation of the rotation's effect on participants' skills in applying evidence to clinical decision making is currently under way. Since one of the major skills of EBM is the ability to assess the quality of information, the evaluation concentrates on the degree to which residents alter their beliefs in the validity a clinical decision following exposure to strong versus weak evidence. Our initial findings suggest that after the rotation, residents are more likely to appropriately alter their beliefs when exposed to strong contrary evidence than they were before the rotation.3

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The authors acknowledge the support of Jerry Niederman, MD, Larry McLain, MD, and George Honig, MD, in the evidence-based morning report efforts.

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1 C. L., DJ D. L. CD D. L. W.

Acquainting learners with the PICO (patient, intervention, comparison, outcome) method for formulating an answerable clinical question and introduces them to library staff.



Identifying a current patient case about which they have a question



Formulating the question using PICO



Selecting an article that they believe best answers their question



Presenting the details of their research process, a critical appraisal of the article, and a description of its application to the patient's case.



#### **Outpatient Morning Report**

#### A New Conference for Internal Medicine Residency Programs

Anderson Spickard, III, MD, MS, Sean P. Ryan, MD, James Anthony Muldowney, III, MD, Lisa Famham, MD

To clarify the use of outpatient morning report in internal medicine residency programs, we conducted a national survey of internal medicine residency directors and a local survey of a cohort of residents at a large teaching hospital. The program directors reported a 24% prevalence of outpatient morning report. The cohort of residents reported that the conference contributed much to their education by meeting specific learning needs and covering topics not covered elsewhere in their residency training.

KEY WORDS: internship and residency; teaching; internal medicine; morning report.

J GEN INTERN MED 2000;15:822-824.

With the shift of internal medicine training to ambu-latory teaching sites, many residency programs have adopted a new medical educational venue that refleets the realities of current medical practice: outpatient morning report. Defined as a conference for residents and medical students that is dedicated to the presentation and discussion of outpatient cases, outpatient morning report has many attractive features; it can serve as a locus to execute an outpatient curriculum through casebased teaching, provide opportunities to assess and guide the performances of the participants who present and discuss the cases, and meet the socialization needs of residents and students who gather together after seeing patients at distant clinic sites in order to stimulate and educate one another. Outpatient morning report can complement learning on inpatient experiences by exposing Dr. Mahsa shakovinees to common outpatient medical problems, the natural history of disease, and curricular items such as value, as well as the shortcomings, of inpatient morning report, we found only 1 study regarding outpatient morning report.10 Malone and Jackson10 compared the educational characteristics of inpatient and outpatient morning report at their institution. They found that residents read about and discussed the pathophysiology, differential diagnosis, and management of their patients' problems equally for inpatient and outpatient morning reports, but that outpatient morning report afforded residents a more learner centered setting and more discussion of general internal medicine topics, patient follow-up, and socioeconomic issues than did inpatient morning report.

To determine how many internal medicine residency programs use outpatient morning report, how it is used, and how it is valued, we conducted 2 studies: (1) a national survey of internal medicine residency program directors about the use of outpatient morning report, and (2) a local survey involving a 1-year prospective evaluation of the perceptions of residents who participated in outpatient report at Vanderbilt University, a large teaching institution.

#### METHODS

#### Study Design

The prevalence of outpatient morning report was determined from a brief questionnaire that was sent to the residency program directors of 404 internal medicine departments who were identified through the 1998-1999 Graduate Medical Education Directory. Respondents were asked whether their program has an outpatient morning report; if so, they were asked to describe the format in-

# Out paitient

\* 83% Resident reported very good or outstanding - 4.7 of 5

Approximately one fourth of programs have an outpatient morning report

Table 1. Characteristics of Outpatient Morning Report in U.S. Internal Medicine Residency Programs

	n (%)
Programs with outpatient morning report	88 (23.8%)
Frequency of sessions	
1–2 times/month	12 (13%)
1 time/week	35 (40%)
2–5 times/week	41 (47%)
Who attends the sessions?*	
Attending physician	82 (93%)
Chief resident	59 (67%)
Resident	88 (100%)
Medical student <sup>†</sup>	58 (66%)
Who leads the sessions?*	
Attending physician	53 (60%)
Chief resident	40 (45%)
Resident	24 (27%)
Medical student	1 (1%)
Who chooses the cases?*	
Attending physician	32 (36%)
Chief resident	32 (36%)
Resident	64 (73%)
Medical student	10 (11%)
Who presents the cases?*	
Attending physician	20 (23%)
Chief resident	13 (15%)
Resident	85 (97%)
Medical student	17 (19%)

<sup>\*</sup>Respondents could check as many options as applied for this category. Therefore, the sum of the percentages for this category ex-Dr. Mahsa shakouceeds 100%.

<sup>&</sup>lt;sup>†</sup>Twenty percent of medical students were classified as third-year

#### Outpatient Morning Report: A New Educational Venue

Anderson Spickard III, MD, MS, Jeff B. Hales, MD, and Shelley Ellis, MD

#### ABSTRACT

Increasingly, medical educators are looking for ways to train residents and medical students in outpatient medicine. One novel idea, outpatient morning report, draws upon the concept of inpatient morning report and applies a similar conference format to the outpatient setting. The authors describe outpatient morning report and comment on its successful use in their institution. Acad. Med. 2000;75:197.

The neighborhood of medical training is changing. Much of patient care is moving out of the hospital, physicians are working more in teams and less alone to provide comprehensive services, and technology is advancing to assist all parties with diagnosis and communication. Such changes have led medical educators to adjust their curricula. One such adjustment has been the introduction of a "new kid on the block": outpatient morning report.

In 1995, Vanderbilt University Department of Medicine first instituted the outpatient morning report to meet the needs of the increasing number of residents and medical students rotating through ambulatory care settings. The outpatient morning report provides a forum for case-based learning; introease; and allows residents and students who are rotating in geographically different sites to share their experiences and learn from each other. The onehour conferences are held four mornings each week and are facilitated by a faculty member in general internal medicine or by one of our two chief medical residents in outpatient care. Participants include first- and secondyear internal medicine residents taking part in a one- or two-month ambulatory block rotation and fourth-year medical students completing a required fourweek clerkship in primary care medicine. Internal medicine residents on other rotations are also welcome to attend. The residents attend all four sessions each week and the medical students come once or twice a week. Every resident and medical student is assigned to present a patient case from his or her clinical experiences at least once during the rotation. Faculty members and chief residents provide guidance to presenters to ensure that important topics are covered in an informative manner. Before each morning report, the designated presenter enters his or her case (without revealing the diagnosis) into the Vanderbilt Outpatient Morning Report Web Site, which heightens interest in the session. After a case is presented, the facilitator solicits participants' learning goals related to the case and then leads a group discussion relevant to

the case provides a five-minute summary of the topic and a review article or handout. Afterwards, the presenter adds the diagnosis and handout information to the Web site to archive learning points for future reference.

In a recent 12-month prospective study at our institution, residents and students rated the educational value of the outpatient morning report 4.7 on a five-point scale. They particularly liked the learning atmosphere, the leadership of the chief residents, the practicality of the cases, and the opportunity to review topics not covered elsewhere in their training. While other formats for morning reports might be successful, participants' responses support a more participatory role for medical students and residents and a facilitating role for chief residents and attendings.

Clearly, outpatient morning report can be a popular, learner-centered venue where important curricular objectives are achieved. However, further evaluations of outpatient morning report programs are needed to determine whether this "new neighbor" is here to stay or is just passing through.

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# Out patient

Entering the case (without diagnosis) into the Web Site

Resident and medical student present a patient case

Faculty members and chief residents provide guidance to presenters to ensure that important topics are covered

Facilitator leads a group discussion relevant to these goals

Summary of the topic and a review article or handout

Dr. Mahsa shakour



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# Challenges



# **Improve**



# **Education-presentation**

## Changes cause to improve:

- presentation of articles
- comments by specialists
- a computer database, and regular followups
- quizzes and mini-lectures
- programs that implemented innovations

(Amin et al., 2000)

Many residents (40%) felt that the contributions from students at morning report added to their learning.

### Preliminary experience with a new medicine morning report format incorporating multimedia and up-to-date

Khaja H. Mujtaba Quadri, Tara Jaffery, Ali Yawar Alam, Faisal Rahim Shifa College of Medicine, Islamabad.

#### Abstract

To determine the impact of multimedia and up-todate on internal medicine resident learning in morning report (MR), we converted our traditional medicine morning report to 'Up-to-date' programme incorporated and multimedia supported format which includes computer, multimedia projector and up-to-date CD ROM. A questionnaire was administered three months after the change and rated on a Likert scale. Preliminary experience demonstrated of a favourable overall resident and faculty perception and acceptance of the change.

#### Introduction

Medicine has lately taken a learner centered twist in higher education. Most house staff considers the primary function of morning report (MR) to be educational.<sup>1</sup> Attending physicians with limited knowledge are often viewed as the major obstacle to effective teaching in morning reports.<sup>2</sup> Morning reports can be used effectively to address nontraditional or rarely discussed topics that are important to the overall professional development of residents.<sup>3</sup>

Outpatient morning reports have also found a niche in several leading academic centers to meet the needs of increasing numbers of residents and medical students rotating through ambulatory settings.<sup>4</sup>

The purpose of morning report has been predominantly cited as education, evaluation of residents and quality of services, detection and reporting of adverse events, discussion of non-medical issues and social interaction.<sup>5</sup> In this information technology age, one challenge is to create an educational system which is better able to respond to changes in the outside world than has been the case to date.<sup>6</sup>

Medicine morning report has been a time honored learning tradition but it appears to have been trapped in its evolutionary trajectory by forces of stagnation.

In an effort to create a renewed interest in this prime academic activity, a change in format, content and attractiveness of presentations has become imperative. In addition, evidence 'at hand' is replacing unchallenged "opinion based" expertise of faculty. At Shifa College of

Medicine and Shifa International Hospitals we attempted to change this status quo and our preliminary experience is reported here.

#### Methods and Results

At our institution comprising of a blend of North America, United Kingdom and Pakistani trained faculty, we had for the previous six years adopted a traditional morning report format consisting of presentation of interesting cases by residents with the aid of overhead projectors, transparencies, a white board and an X-ray illuminator box. Consultants, residents and elective students were participants in the process. The expert opinion was predominantly "opinion" based. In an effort to move to a more 'evidence based' setting, a new pilot project was introduced in 2004-2005 incorporating a computer, multimedia projector and the popular CD Rom reference library, 'UptoDate'.

This format involved case presentations made in 'power point' and projected by a multimedia projector, followed by a targeted topic presentation. Provision of online internet access and Up-to-Date CD Rom was ensured. This 4 monthly updated reference library is edited by Dr.Burton Rose at Harvard University, Boston, USA.

A survey of 40 participants was sought three months after the pilot project was initiated, whereas 15 participants were excluded having attended only the new morning report format.

Statistical software SPSS Version10.0 was used for data entry and analysis. Data analysis was based on exposure to previous format of morning report in comparison with the new format on the same respondents. The study participants were asked to rate their experience of the two formats of morning report (as Better or Not Better) in terms of the various explanatory variables, which were 'Use of audiovisual aids', 'scientific information', 'learning,', 'Use of Up-to-Date' and 'whether they would recommend any one format of morning report to others'. Chi-Square test was applied to see the association between the outcome of interest and each of the explanatory variables. Fisher's Exact test was used where the expected cell count was less than five. The level of statistical significance was p<0.05.

Table 1 depicts the results of the survey. It was

To determine the impact of multimedia and upto date on internal medicine resident learning in morning report (MR)

- Overhead projectors, transparencies, a white board and an X-ray illuminator box
- computer, multimedia projector and the popular CD Rom reference library, 'UptoDate' (In an effort to move to a more 'evidence based')

# 92% - usage of audiovisual aids - better

# 64% - Use of Up-to-Date CD Rom reference library improved the new morning report

(Quadri et al., 2007)

## Resident Expectations of Morning Report

- **#** Educational
- Discuss the management of a few interesting cases not all patients
- stepwise presentation
- Disease process, diagnostic workup, and evaluation of tests and procedures (important)
- Ethics and research methods (less important)
- (Gross et al., 1999)

## **The Social Transformation**

Morning report was an anxiety-provoking experience in those days.

the junior residents would gather to report on admissions, discharges, and transfers under the stern eye of a chief resident

(Parrino, 1997)

## **Stress**

- # Fear in both learners and teachers- because they may embarrassingly miss diagnostic possibilities including even the actual diagnosis
- Learners -lack of experience
- \* Teachers -use non analytical fashion known as "pattern recognition" then miss important possibilities

- Tip1: organizing the case and identifying focal findings
- **TIP 2:** the hybrid matrix table

- STEP 1: Identify Focal Findings
- **STEP 2: Review and Complete Hybrid Matrix**

(Sacher and Detsky, 2009)

Table 1. Hybrid Matrix Table

Etiologies Systems	Infections	Neoplastic	Collagen- Vascular/ Autoimmune	Vascular	Toxic Metabolic* Endocrine	Other -Congenital -Trauma -Psychogenic				
Cardiovascular										
Respiratory										
Gastrointestinal										
Genitourinary										
Musculoskeletal										
Neurological										
Hematological										
Integument										

<sup>\*</sup>Toxic refers to the "things outside the body" that cause illness, principally medications, elicit drugs, alcohol, or poisons. Metabolic refers to abnormal values of electrolyte, calcium, phosphate, or magnesium.

Table 2. Completed Matrix Example

Etiologies	Infections	Neoplastic	Collagen-	Vascular	Toxic	Other: eg
Luciogies	IIICOUOIIS	Noopiasiio	Vascular/	Vascalai	Metabolic	Congenital
			Autoimmune		Endocrine	Trauma
Systems			/ tatoli i i i i i i i i i i i i i i i i i i		Zildooiiilo	Degenerative
Oysteins						Psychogenic
					Х	X
Cardiovascular					Hypotension:	Arrythmias
					(tamsulosin	Panic attacks
					increased)	
Respiratory			X Asthma		, and the second	
Gastrointestinal		Х				
		Anemia:				
		(2nd to				
		blood				
		loss e.g.				
		colon				
		cancer)				
Genitourinary						
Musculoskeletal						
Neurological					X Hypoglycemia:	
					(glyburide)	
					Hyponatremia:	
					(hydrochlorothiazide)	
Hematological		X			X	X
		Anemia:			Anemia:	Anemia:
		(leukemia			(Nutritional)	(2nd to
		MDS)				bleeding
						colonic
						diverticula or
						peptic ulcer
						disease)
Integument						

# Tips for establishing, organising, running and evaluating morning report

## **Establishing meetings**

- Evaluate the existing handover procedure
- Get support
- Allocate an hour for meetings

## Organisation

- Choose a location within the department to maximise attendance.
- Choose a room that is small enough to encourage active participation and personal interaction.
- Make attendance compulsory
- Provide facilities such as a television, video player,

. . .

Provide coffee, tea and...

(Fassett and Bollipo, 2006)

#### Running a meeting

- Insist on complete, accurate case
- Focus discussions on management of the patient in question.
- Give positive feedback in public, negative feedback privately
- Start the meeting on time and finish early wherever possible
- Education should be a by-product of case discussions and not the primary focus.

#### **Evaluation**

- Conduct periodic formal evaluation
- Obtain informal feedback
- Implement changes in response to feedback

## **Tips**

- Planning and preparation
- 2. The case
- Running the show
- 4. Wrapping up
- 5. Closing the Loop

## Tips for Facilitating Morning Report

Luke A. Devine, Wayne L. Gold, Andrea V. Page, Steven L. Shumak, Brian M. Wong, Natalie Wong, Lynfa



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#### PLANNING AND PREPARATION:

- Ensure audiovisual aids are present and working before starting.
- Start and end on time.
- Encourage all faculty to attend and participate.
- Know the audience (including names).

#### THE CASE:

- The case can be undifferentiated or one for which the diagnosis and even response to treatment are known.
- There are pros and cons to the facilitator knowing details of the case in advance.
- 7) If details of the case are not known to the facilitator, determine with the person presenting if the discussion should be focused on diagnosis, management or other pertinent issues.
- Cases need not be limited to inpatients and can include ambulatory cases and case simulations.

#### **RUNNING THE SHOW:**

- 9) Establish a respectful learning climate.
- Personal anecdotes and reflections on past cases can engage the audience.

- 11) Ensure time is spent discussing learning issues valuable to all present.
- 12) Facilitate and engage in discussion rather than deliver a lecture.
- 13) Use a mix of pattern recognition (heuristics) and analytical reasoning strategies.
- 14) Start with a question that has an obvious answer if dealing with a quiet audience.
- 15) Promote volunteerism for answers as much as possible, but direct a question to a specific person if no one volunteers.
- 16) Begin by engaging the most junior learners and advance to involve senior learners.
- 17) Encourage resource stewardship and evidence-based medicine.
- 18) Acknowledge areas of uncertainty and don't be afraid to say "I don't know".
- 19) Teaching "scripts" or the use of a systematic approach to developing a differential diagnosis can be used when discussing less familiar topics.
- 20) Highlight the variability in clinical approach amongst "the experts" in Dr. Mal the room.

#### **WRAPPING-UP:**

21) Ensure there is time to summarize "take home points".

22) Provide learners with the opportunity to summarize what they have learned.

#### **CLOSING THE LOOP:**

23) Reinforcement of learning can include a distribution of a relevant paper or providing a summary of learning points via email or blog.

- 24) Maintain a case log to ensure a balanced curriculum.
- 25) Provide feedback to the case presenter and facilitator

## Summarize

- Morning report is an opportunity for residents to exercise and improve their knowledge and their leadership, presentation, and problem-solving skills.
- Then teacher as a facilitator needs to use of this opportunity in best way.

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