Glycemic Control

- <8.0
- 8.0-8.99
- 9.0-9.99
- >10.0

A1c Checked in Last 6 Months

- Yes
- No

Blood Pressure Control

- <140/90
- >140/90

Microalbuminuria Screen in Past 12 Months OR on ACE-I

- Yes
- No

Name	MRN	Age	Last visit date	BP	Tobacco Use	Microalbumin or ACE AY 2014	LDL date	Last LDL	A1c date	Last A1c	Last eye exam	Last foot exam
Sarah McKenna	123456789	52	10.1.2017	180/100	y	Y	7.1.2017	198	10.1.2017	10.6	9.5.2017	---
Kathryn Jones	234567890	41	9.9.2017	132/78	y	Y	9.9.2017	104	9.9.2017	11	3.6.2017	6.9.2017
Marta Gutierrez	345678901	63	8.6.2015	150/45	n	Y	8.6.2015	78	8.6.2015	7.1	9.4.2016	9.4.2016
Miguel Herrera	456789012	41	9.4.2016	126/76	y	Y	9.4.2016	178	9.4.2016	9.5	---	---
Paula Cheers	567890123	68	1.6.2017	124/76	y	Y	1.16.2017	76	1.16.2017	10.4	1.16.2016	1.6.2015
Sandra Carter	678901234	75	6.8.2017	170/90	n	N	6.8.2017	105	6.8.2017	7.3	---	1.3.2014
Michael Warner	789012345	52	1.5.2017	132/82	n	Y	7.6.2016	85	1.5.2017	9.7	1.1.2016	7.6.2016
Eldrin Porter	890123456	58	10.15.2017	148/82	n	N	4.15.2017	98	10.15.2017	6.8	4.15.2017	4.15.2017
Jeffrey Hall	901234567	37	11.17.2017	112/75	n	N	11.17.2017	66	11.17.2017	8.1	2.6.2017	---
Sally Rafa	212346789	59	11.8.2017	135/80	n	N	5.8.2017	134	11.8.2017	7.2	5.31.2017	5.8.2017
Ani Patel	245678739	64	9.8.2017	138/95	n	Y	9.8.2017	112	9.8.2017	6.8	---	9.8.2015

Provider: Dr. Maria Cordero

CC: Dr. Karen Welsh, Medical Director

DELIVERING OPTIMAL CARE: CASE BASED-LEARNING OVERVIEW

The overarching goal of the DOC curriculum is to help students appreciate the factors influencing the delivery of care beyond the science of medicine: access, healthcare equity, healthcare quality, patient safety, economics, and the interactions that occur between team members. Over the course of Phase 1b, students will work through 3 patient cases (this is the second case) that highlight these aspects of care.

All of the cases are based on real patients and real clinician data. It is helpful for students to be reminded of this at the start of the sessions.

These sessions will use a learning process known as "case based learning"—students will read through the case and discuss as they go, but unlike PBL, they will be provided specific learning issues at various points in the cases that are critical for their understanding of the relevant care delivery concepts. The students should, for the most part, teach each other these concepts in the 2nd session (unless prompts direct otherwise). Your role as the facilitator is to ensure that the students remain on task, assist with time management if the group seems to go on tangents, and assess the students' ability to work as a team to adequately complete the learning goals from the sessions. You do not need to prepare mini-lectures or talks on any of the content.

We have provided you with our key points that we hope the students will cover. Students should be STRONGLY ENCOURAGED to use the references provided to complete their learning issue presentations on day 2. These references have been selected by the authors as key references the students should be familiar with. Each student should present for 5-10 minutes, but no more than this, to ensure there is time to complete the final group activity.

Your sole assessment activity will be to complete the group evaluation (1 document) at the end of each two-day session. Please review this document ahead of the first session so you are best able to observe the student teamwork behaviors and give feedback. **Please complete this assessment within 1 week of the end of the session (on or before Friday, December 15).**

Students will also submit a paper at the end of day 2 that will be graded by the course directors.

Diabetes Care Delivery: From Patient to Panel

Primary Authors: Brigid Dolan, MD, MEd
                        Mita Sanghavi Goel, MD, MPH
                        Muriel Jean-Jacques, MD, MA
                        Stephen Persell, MD, MPH

SUMMARY

Students will begin this exercise by discussing a summary of one physician's diabetes panel management. The students will receive graphical overview of the physician's attainment of diabetes quality metrics based on HEDIS criteria. Students will also receive detailed information for eleven patients that will allow them to think more critically about quality measures. They will spend approximately half of the first session discussing the panel before moving on to the case of patient Kathryn Jones. Ms. Jones is a 41 year-old woman with poorly controlled diabetes. While she is keeping all of her appointments and receiving all appropriate screenings, her hemoglobin A1c remains elevated at 11 and her medications have not changed for over 1 year. The students will explore why this might happen and will delve into concepts including health belief models, health literacy, and health numeracy to understand her barriers to glycemic control. Important issues in this case focus on the Organization and Economics of Medicine (How can payment structures impact care models used in chronic disease management? What are the consequences of pay-for-performance in care?), Healthcare Quality and Patient Safety (What is the difference between a process measure and an outcome measure? How do types of interventions differ to address quality in each type?), Healthcare Equity and Advocacy (How do health belief models impact patient's care? What is health literacy? Numeracy? How might low health literacy or numeracy impact self-management behaviors required for diabetes care?) and Teamwork and Leadership (Who can physicians include on diabetes care teams to help improve glycemic control? How could one envision including a variety of care team members to improve diabetes care?).

LEARNING OBJECTIVES
1. Evaluate how different payment models can impact the organization of patient care.
2. Compare team structures and team members who provide care in chronic disease management.
3. Explain how health belief models can influence patient acceptance of recommended care.
4.   Define and apply health literacy and numeracy to patient cases.
5. Compare and contrast methods to improve process versus outcome measures in chronic disease management.
6. Evaluate the use of quality improvement techniques applied to diabetes care.

Students should primarily rely on the references provided to research their learning issues (LIs). If students use Pubmed, please be certain to encourage the group to assess the relevance and quality of papers that students select. The students have been given a great introduction to asking and answering questions through structured searches of the primary literature using tools such as PubMed by the Library Staff and there is an M1 resource page on the Galter Library site.

Day One, Part One: Panel Management
Spend ~50 minutes on this content

A1. Caring for Populations

Dr. Maria Cordero is a primary care physician practicing with Primary Care Group. She cares for 1800 patients, and has approximately 640 patients with diabetes in her panel. Attached, you will find the first page of her quarterly diabetes panel report. This shows how well her panel as a whole is doing meeting certain criteria associated with diabetes care. These metrics are based on 2014 Healthcare Effectiveness Data and Information Set (HEDIS) criteria.

In your groups, first identify which measures are consistent with *process measures* and which are most consistent with *outcome measures*. Then, discuss which measures Dr. Cordero seems to be achieving most easily and which are more challenging. Why do you think that is the case?

Why do you think Dr. Cordero receives these reports? Can you come up with pros and cons to this type of system? Also, discuss with your facilitator how easy or difficult it is for them to get process or outcome metrics related to the care of the patients they take care of. Reflect back to your HQPS site visit goal regarding the barriers to receiving and responding to clinical quality data and discuss as a small group.

A1 Facilitator Guide Annotations:

Students were introduced to the concept of quality measurement during their first year of medical school in Foundations 1. Students may struggle with the difference between process and outcome measures, as this was a challenging concept for them. Help them to use the panel data that they are reviewing to try to come up with the differences. Some students in your group may have continuity experiences in the Education Centered Medical Home (ECMH), a clinic they attend 2x a month where they actually engage in some panel management activities. Remind the students that what they are doing in ECMH clinic may be similar to how these physicians and practices are analyzing patient data.

Students will not have reviewed the literature on ways to improve process and outcome measures prior to today's session, so we will include learning issues that can help them to explore these issues further. However, encourage students to think beyond the patient/physician dyad: what systems structures might impact outcomes? Are there payment structures they think might impact outcomes?

Learning Issues:
1) Summarize the scientific limitations to the intermediate biological outcomes that have been used to assess the quality of care (i.e. blood pressure <140/90 mmHg at the last visit in the measurement period or A1c <8.0).
2) Compare which quality improvement strategies have been shown to be effective for improving processes of care (i.e. A1c testing, eye exams, vaccinations, or nephropathy screening) to those that are effective in improving biological outcomes for chronic conditions (i.e. A1c level and blood pressure control). *Students should be selective in their use of the following references to answer these questions and do not need to read each paper in its entirety*
3) Describe the potential undesirable consequences of providing doctors financial incentives for the A1c results they achieve or of public reporting of those results.

A2. Caring for Populations

Once a month, Dr. Cordero's practice group has a meeting to discuss upcoming changes to the practice environment led by Dr. Karen Welsh, the medical director of the practice. Dr. Welsh presents the overall practice's metrics regarding diabetes care and notes that they are well below the national average. She notes that the healthcare system you are part of is considering being part of a pilot project that includes changes in both the team structure and the way that your group receives payment from insurance companies.

Your group has always been paid based on "fee for service" and now she is proposing that you work with an insurance company to pilot a "shared savings model" that is considered typical for new "accountable care organizations." A colleague suggests that this sounds similar to prior efforts to implement "pay for performance" models of care and doesn't like the idea.

First, discuss what team changes might help improve care for your patients with diabetes. Then, share what you know about the payment models above. Your facilitator will give a brief presentation on the different models so you have a better understanding of this data.

A2 Facilitator Guide Annotations:

Students have not learned a lot to date regarding payment structures. We have provided a brief PowerPoint slide show that highlights the differences in each payment structure. After student discussion, please use the slides to help students understand the different models. The discussion can stay relatively shallow as the goal is for students to begin to understand how payment structures and different models impact the care priorities of major health systems, not to completely understand the ins and outs of each system.

Students have been exposed to a variety of healthcare team members, so encourage them to be creative in considering which care team members might be able to help in which areas.

Learning Issues to Assign:
1) Outline at least one example of how team structure can be designed to improve patient chronic disease management.
2) Define the concept of pay for performance. Then, evaluate its effectiveness in improving patient care thus far.
3) Compare how incentives to adopt team models for diabetes care differ between fee-for-service payment models and accountable care organization models.

Day One, Part Two: Patient Chronic Disease Management
Spend ~50 minutes on this content

B1. Beginning of case

Kathryn Jones is a 41 year old woman who returns for a follow up visit to discuss her Type 2 Diabetes. At her last visit 3 months ago, you discussed her poor diabetes control. At that time, given her hemoglobin A1c of 11, you had recommended that she begin insulin glargine. She declined and wanted to continue on her metformin and glipizide while making additional changes to her diet and physical activity.

Past Medical History:
Hypertension
Diabetes
Hyperlipidemia
Abnormal Pap smear (HGSIL) March 2014

Medications:
Metformin 1000 mg twice daily
Glipizide Extended Release 10 mg daily
Lisinopril 20 mg daily
Atorvastatin 40 mg daily

Allergies:
No known drug allergies

Social History:
Lives with her 2 children ages 15 and 17 years. She graduated high school and works as a cashier at the local grocery store. No tobacco. Drinks 1 glass of wine per month.

Family History:
Mother with Type 2 diabetes, deceased age 66.

Physical Exam:
Temp 98.6 F, HR 72, RR 10, BP 132/78, Weight 120 lbs, Height 4 feet 9 inches
Gen: comfortable appearing
CV: regular rhythm, normal S1, S2, no m/r/g
Lungs: clear to auscultation bilaterally
Abd: soft, non-tender, non-distended, normoactive bowel sounds
Ext: sensation to monofilament intact in lower extremities bilaterally, +2 dorsalis pedis pulses bilaterally, skin without breakdown or callous formation.

B1 Facilitator's guide Annotations

From this early portion of the case, students should begin to discuss:
- Indicators of diabetes control. Given the preceding discussion around quality metrics, this should be a curtailed discussion.
- Indications for initiating insulin therapy. Because the clinical recommendations are not the focus of this case, limit this discussion to a few minutes.
- Focus the discussion on why the patient would decline insulin therapy.

B2.

On review of her health record, you note that she has had A1cs >10 for the last 18 months. She has returned for visits every 3 months for follow up during this time.

B2 Facilitator's Guide Annotations

It's clear at this point that the patient needs insulin, yet for 18 months the patient has continued on the same therapy. Have students ponder factors that can lead to patients who have close follow-up but do not have good glycemic control.

Learning Issue to Assign:
1) Explore the reasons a provider may not prescribe a medication, even when clinically indicated. Define the term "Clinical Inertia." and reasons behind it.

B3.

In further conversation, the patient reveals that insulin made her mother really sick and she worries that it will do the same to her. Soon after her mother started insulin, her kidney failure worsened, she started hemodialysis, and she died within 2 years of starting dialysis from a blood stream infection.

B3 Facilitator's Guide Annotations

All of the students have a continuity clinic every other week and they can draw on experiences from these session. Have students share if they have encountered any similar scenarios in their IP/ECMH experiences with patients. How did they or their preceptor discuss the patient's concerns?

Learning issue that should be assigned:
1) Describe a few reasons, beyond cost-related concerns, that a patient might decline insulin therapy. Include examples of health beliefs that may contribute to a patient's reluctance to start insulin therapy.

B4.

After extensive discussion, she agrees to try insulin therapy. You stop her glipizide, continue her metformin 1000 twice daily and initiate insulin glargine 10 units nightly. You advise her to check her fasting blood sugar daily with a target of 70-130 mg/dL. You recommend she increase her insulin by 2 units every 3 days until her fasting blood sugars are in the target range.

Upon returning 12 weeks later, she states, "My blood sugars are great!" You review her blood sugar log, which she proudly displays. Her fasting blood sugars range from 170-200 fasting. She states she is taking insulin, just as you had recommended, 10 units nightly. Furthermore, she stopped both her glipizide and metformin when she started her insulin.

B4 Facilitator's Guide Annotations

After reading this portion of the case, spend a few minutes discussing that it seems the patient is trying to manage her diabetes, yet there is a misunderstanding between what the provider has recommended and what the patient is doing. The issues no longer seem related to differences in health beliefs, rather in the ability to process and apply health related information.

Learning issues that should be assigned here include:
1) Define health literacy and health numeracy. Explain how low health literacy might affect a patient's ability to manage their diabetes. Describe how low health numeracy may affect a patient's ability to titrate insulin therapy in this example.

B5.

After realizing that the patient requires more support with diabetes education and management, you look into potential resources available to this patient. Your social worker mentions that the practice has just started a peer coaching initiative. There are also classes run by community health educators that the patient can attend. She reports that there are 2 available options, peer coaching for diabetes and community health workers for diabetes. You have heard a little bit about each one, but need to decide which you would choose for Ms. Jones.

B5 Facilitators' Guide Annotations

Students may be aware of community health workers or peer coaches, so they can discuss this together before assigning the learning issue if there is time for discussion.

The assigned learning issue for this section:
1) Define "community health workers" and "peer coaches". Explain how these types of care providers can be incorporated into clinical practice. Provide examples from the literature regarding glycemic control data in your discussion

LEARNING ISSUE LIST AND SUGGESTED REFERENCES

AT THE END OF DAY ONE WHEN LEARNING ISSUES ARE BEING ASSIGNED, YOU MAY WISH TO SHARE THE FOLLOWING HANDOUT WITH THE STUDENTS. IT WILL ALSO BE POSTED ON EMERG (AFTER THE SESSION) WHERE THE STUDENTS CAN ACCESS THE DOCUMENT. THIS DETAILS EACH OF THE LEARNING ISSUES ALONG WITH THE SUGGESTED REFERENCES WHERE STUDENTS SHOULD START IN ORDER TO ANSWER THEIR LEARNING ISSUE CLEARLY. FOR SOME LEARNING ISSUES, ADDITIONAL REFERENCES MAY BE NEEDED AND CAN BE EASILY FOUND USING PUBMED OR GOOGLE SEARCHES (CASE AUTHORS HAVE VERIFIED EASE OF ACCESS).

<u>LEARNING ISSUES AND REFERENCE LIST</u>

1) Summarize the scientific limitations to the intermediate biological outcomes that have been used to assess the quality of care (i.e. blood pressure <140/90 mmHg at the last visit in the measurement period or A1c <8.0).

--*Pogach L1, Engelgau M, Aron D. Measuring progress toward achieving hemoglobin A1c goals in diabetes care: pass/fail or partial credit. JAMA. 2007 Feb 7;297(5):520-3.*
--*Kerr EA1, Lucatorto MA, Holleman R, Hogan MM, Klamerus ML, Hofer TP; Monitoring performance for blood pressure management among patients with diabetes mellitus: too much of a good thing? VA Diabetes Quality Enhancement Research Initiative (QUERI) Workgroup on Clinical Action Measures. Arch Intern Med. 2012 Jun 25;172(12):938-45.*

2) Compare which quality improvement strategies have been shown to be effective for improving processes of care (i.e. A1c testing, eye exams, vaccinations, or nephropathy screening) to those that are effective in improving biological outcomes for chronic conditions (i.e. A1c level and blood pressure control). *Students should be selective in their use of the following references to answer these questions and do not need to read each paper in its entirety*

--*Scott I. What are the most effective strategies for improving quality and safety of health care? Intern Med J. 2009;39:389-400.*
--*Tricco AC, Ivers NM, Grimshaw JM, Moher D, Turner L, Galipeau J, Halperin I, Vachon B, Ramsay T, Manns B, Tonelli M, Shojania K. Effectiveness of quality improvement strategies on the management of diabetes: a systematic review and meta-analysis. Lancet. 2012 Jun 16; 379(9833)2252-61.*
--*Bright TJ1, Wong A, Dhurjati R, Bristow E, Bastian L, Coeytaux RR, Samsa G, Hasselblad V, Williams JW, Musty MD, Wing L, Kendrick AS, Sanders GD, Lobach D. Effect of clinical decision-support systems: a systematic review. Ann Intern Med. 2012 Jul 3;157(1):29-43. doi: 10.7326/0003-4819-157-1-201207030-00450.*
--*Audit and feedback: effects on professional practice and healthcare outcomes. Cochrane Database Syst Rev. 2012 Jun 13;6:CD000259. doi: 10.1002/14651858.CD000259.*

3) Describe the potential undesirable consequences of providing doctors financial incentives for the A1c results they achieve or of public reporting of those results.

--*Casalino LP, Alexander GC, Jin L, Konetzka RT. General internists' views on pay-for-performance and public reporting of quality scores: a national survey. Health Aff. 2007 Mar-Apr;26(2):492-9.*
--*Wharam JF, Paasche-Orlow MK, Farber NJ, Sinsky C, Rucker L, Rask KJ, Figaro MK, Braddock C 3rd, Barry MJ, Sulmasy DP. High quality care and ethical pay-for-performance: a Society of General Internal Medicine policy analysis. J Gen Intern Med. 2009 Jul;24(7):854-9. doi: 10.1007/s11606-009-0947-3. Epub 2009 Mar 18.*
-- *Hibbard JH, Greene J, Sacks R, Overton V. Does Compensating Primary Care Providers to Produce Higher Quality Make Them More or Less Patient Centric? Med Care Res Rev. 2015 Aug;72(4):481-95.*

4) Outline at least one example of how team structure can be designed to improve patient chronic disease management.

-*Bodenheimer, T. Transforming Practice. NEJM 359 (20): 2086-2089*
-*Green BB, et al JAMA 2008; JAMA Internal Medicine 2013*

5) Define the concept of pay for performance. Then, evaluate its effectiveness in improving patient care thus far.

--*Rosenthal MB, Dudley RA. Pay-for Performance: Will the Latest Payment Trend Improve Care. JAMA 2007; 297:740-743.*

--Houle SK1, McAlister FA, Jackevicius CA, Chuck AW, Tsuyuki RT. Does performance-based remuneration for individual health care practitioners affect patient care?: a systematic review. Ann Intern Med. 2012 Dec 18;157(12):889-99.

6) Compare how incentives to adopt team models for diabetes care differ between fee-for-service payment models and accountable care organization models.

-Hong, CS, Abrams, MK, Ferris, TG. Toward Increased Adoption of Complex Care Management. NEJM 371 (6) 491-493)

7) Explore the reasons a provider may not prescribe a medication, even when clinically indicated. Define the term "Clinical Inertia." and reasons behind it.

--Phillips LS, Branch WT, Cook CB, Doyle JP, El-Kebbi IM, Gallina DL, Miller CD, Ziemer DC, Barnes CS. Clinical inertia. Ann Intern Med. 2001 Nov 6;135(9):825-34.

--Khunti K, Wolden ML, Thorsted BL, Andersen M, Davies MJ. Clinical inertia in people with type 2 diabetes: a retrospective cohort study of more than 80,000 people. Diabetes Care. 2013;36:3411-3417.

8) Describe a few reasons, beyond cost-related concerns, that a patient might decline insulin therapy. Include examples of health beliefs that may contribute to a patient's reluctance to start insulin therapy.

--Brod, M. Kongsø JH, Lessard S, Christensen TL. Psychological insulin resistance: patient beliefs and implications for diabetes management. Qual Life Res. 2009 Feb;18(1):23-32.

-- Polonsky WH, Jackson RA: What's so tough about taking insulin? Addressing the problem of psychological insulin resistance in type 2 diabetes. Clinical Diabetes 22:147-150,2004.

9) Define health literacy and health numeracy. Explain how low health literacy might affect a patient's ability to manage their diabetes. Describe how low health numeracy may affect a patient's ability to titrate insulin therapy in this example.

--Dean Schillinger, MD; Kevin Grumbach, MD; John Piette, PhD; Frances Wang, MS; Dennis Osmond, PhD; Carolyn Daher, MPH; Jorge Palacios, MA; Gabriela Diaz Sullivan, MD; Andrew B. Bindman, MD ***Association of Health Literacy With Diabetes Outcomes*** *JAMA. 2002;288(4):475-482. doi:10.1001/jama.288.4.475.*

--Kerri Cavanaugh, MD, MHS; Mary Margaret Huizinga, MD, MPH; Kenneth A. Wallston, PhD; Tebeb Gebretsadik, MPH; Ayumi Shintani, PhD, MPH; Dianne Davis, RD, CDE; Rebecca Pratt Gregory, RD, CDE; Lynn Fuchs, PhD; Robb Malone, PharmD, CDE; Andrea Cherrington, MD, MPH; Michael Pignone, MD, MPH; Darren A. DeWalt, MD, MPH; Tom A. Elasy, MD, MPH; and Russell L. Rothman, MD, MPP ***Association of Numeracy and Diabetes Control*** * Ann Intern Med. 2008;148(10):737-746. doi:10.7326/0003-4819-148-10-200805200-00006*

10) Define "community health workers" and "peer coaches". Explain how these types of care providers can be incorporated into clinical practice. Provide examples from the literature regarding glycemic control data in your discussion

--Dale JR, Williams SM, and Bowyer V. What is the effect of peer support on diabetes outcomes in adults? A systematic review. Diabet Med. 2012;29(11):1361-77.

--Thom DH et al. Impact of Peer Health Coaching on Glyce- mic Control in Low-Income Patients With Diabetes: A Randomized Controlled Trial. Ann Fam Med 2013;11:137-144. doi:10.1370/afm.1443.

--Palmas W, March D, Darakjy S et al. Community Health Worker Interventions to Improve Glycemic Control in People with Diabetes: A Systematic Review and Meta-Analysis. J Gen Intern Med. 2015;30(7):1004-12.

DAY TWO: LEARNING ISSUE REPORTS AND GROUP APPLICATION OF KNOWLEDGE
Students will provide 5-10 minute reports for each other where they explore their individual learning issues. Students may prepare handouts for each other to help emphasize key concepts. The Learning Issue Guide below includes pertinent points that the students <u>should teach each other</u>. If students have completely missed the key points, it's appropriate to redirect so the group can learn the relevant information. However, ideally, the students teach each other all of this information. It is appropriate to offer to send additional references to your group after the session to highlight additional relevant information that you hope they learn, given your interest and expertise in this field. <u>Make sure that the group stays on time/on task as there is a group exercise</u> to apply the learning issue information to one additional paper that will be turned in for a grade.

<div align="center"><u>**Learning Issues with Facilitator Summary:**</u></div>

1) Summarize the scientific limitations to the intermediate biological outcomes that have been used to assess the quality of care (i.e. blood pressure <140/90 mmHg at the last visit in the measurement period or A1c <8.0).

> Clinical practice guidelines frequently distill large amounts of clinical data into specific recommendations that are broadly applicable to general populations of patients with a particular condition like diabetes or hypertension but may not apply perfectly well to all patients. Performance measures of intermediate biological outcomes (like A1c or blood pressure control) often use binary cut points for simplicity but these have several limitations. The relationship between the level of the biological outcome and clinical outcomes is often curvilinear, and in the case of A1c and blood pressure may be U-shaped. This means that there may be great benefit improving someone's blood pressure or A1c at the high end of the curve (say reducing someone from an A1c of 12.5 to 8.3) but this improvement is not captured by the quality measure. There is also the possibility of overtreatment and increased risk of harm if the blood pressure or glucose is lowered too much. These measures may also not be applicable to individuals who have other major comorbidities that might make it more difficult or hazardous to pursue tight control of blood pressure or diabetes.
>
> *--Pogach L1, Engelgau M, Aron D. Measuring progress toward achieving hemoglobin A1c goals in diabetes care: pass/fail or partial credit. JAMA. 2007 Feb 7;297(5):520-3.*
> *--Kerr EA1, Lucatorto MA, Holleman R, Hogan MM, Klamerus ML, Hofer TP; Monitoring performance for blood pressure management among patients with diabetes mellitus: too much of a good thing? VA Diabetes Quality Enhancement Research Initiative (QUERI) Workgroup on Clinical Action Measures. Arch Intern Med. 2012 Jun 25;172(12):938-45.*

2) Compare which quality improvement strategies have been shown to be effective for improving processes of care (i.e. A1c testing, eye exams, vaccinations, or nephropathy screening) to those that are effective in improving biological outcomes for chronic conditions (i.e. A1c level and blood pressure control). *Students do not need to read each paper in its entirety*

> The main objective is for students to become familiar with several common quality improvement strategies that have generally been effective for improving processes of care. These broadly include QI strategies targeting health systems (e.g., case management, team changes, electronic patient registries), those targeting health care providers (e.g., audit and feedback, clinician education, financial incentives) and those targeting patients (e.g., education, promotion of self management, reminder systems). The literature here is large and heterogeneous and there is significant variation across studies and clinical topics. Students should be aware that while these methods are frequently effective for improving processes of care, they often only achieve small to moderate amounts of improvement and often, important quality gaps remain.
>
> Changing clinical outcomes for chronic conditions like diabetes or hypertension has often been harder to achieve using the above-mentioned techniques. Strategies affecting systems of care, such as care team changes whereby a team member such as a nurse or pharmacist takes on new roles (such

as providing follow up and medication adjustment by phone or email) are strategies that have improved diabetes or hypertension control.

--Scott I. What are the most effective strategies for improving quality and safety of health care? Intern Med J. 2009;39:389-400.
--Tricco AC, Ivers NM, Grimshaw JM, Moher D, Turner L, Galipeau J, Halperin I, Vachon B, Ramsay T, Manns B, Tonelli M, Shojania K. Effectiveness of quality improvement strategies on the management of diabetes: a systematic review and meta-analysis. Lancet. 2012 Jun 16; 379(9833)2252-61.
--Bright TJ1, Wong A, Dhurjati R, Bristow E, Bastian L, Coeytaux RR, Samsa G, Hasselblad V, Williams JW, Musty MD, Wing L, Kendrick AS, Sanders GD, Lobach D. Effect of clinical decision-support systems: a systematic review. Ann Intern Med. 2012 Jul 3;157(1):29-43. doi: 10.7326/0003-4819-157-1-201207030-00450.
--Audit and feedback: effects on professional practice and healthcare outcomes. Cochrane Database Syst Rev. 2012 Jun 13;6:CD000259. doi: 10.1002/14651858.CD000259..

3) Describe the potential undesirable consequences of providing doctors financial incentives for the A1c results they achieve or of public reporting of those results.

Many physicians support the idea of financially rewarding higher quality care. However, many have raised concerns that existing quality measures are not accurate, do not account for medical and socioeconomic differences that may influence the measures, and may lead to unintended negative consequences. Surveyed primary care internists were less supportive of public reporting of quality measures than P4P. The potential unintended consequences of public reporting or P4P include: diverting attention away from important aspects of care that are not measured, creating disincentives to care for vulnerable populations (i.e., physicians or health systems accepting only patients who can achieve diabetes control), creating an antagonistic relationship between physicians and patients who do not adhere to care plans, or inappropriately penalizing or publically humiliating physicians with worse performance based on inaccurate measures.

--Casalino LP, Alexander GC, Jin L, Konetzka RT. General internists' views on pay-for-performance and public reporting of quality scores: a national survey. Health Aff. 2007 Mar-Apr;26(2):492-9.
--Wharam JF, Paasche-Orlow MK, Farber NJ, Sinsky C, Rucker L, Rask KJ, Figaro MK, Braddock C 3rd, Barry MJ, Sulmasy DP. High quality care and ethical pay-for-performance: a Society of General Internal Medicine policy analysis. J Gen Intern Med. 2009 Jul;24(7):854-9. doi: 10.1007/s11606-009-0947-3. Epub 2009 Mar 18.
-- Hibbard JH, Greene J, Sacks R, Overton V. Does Compensating Primary Care Providers to Produce Higher Quality Make Them More or Less Patient Centric? Med Care Res Rev. 2015 Aug;72(4):481-95.

4) Outline at least one example of how team structure can be designed to improve patient chronic disease management.

Multiple models of care delivery are currently under study. In a NEJM perspective piece, Bodenheimer describes one type of team structure that could improve quality of care and redistribute clinical tasks related to predictable diabetes care tasks. Panel managers (either trained non-clinical team members or medical assistants) could use patient care databases to track patients' need for labs and preventive exams (i.e. q3-6 month A1c, annual microalbumin screens for patients not on ACE-I, eye exams, foot exams); they would be responsible for contacting patients to arrange these services using clear protocols and physician standing order sets. Nurses, dieticians, or CHWs could lead individual or group sessions focused on lifestyle changes to promote healthy behaviors—dietary counseling, increased exercise, culturally congruent diabetes management advice, etc.   At the RCT

level, studies demonstrate that pharmacists using web-based communication and remote monitoring provided were better able to help patients keep at target range; this model could also be employed for the patients in this case.

-Bodenheimer, T. Transforming Practice. NEJM 359 (20): 2086-2089
-Green BB, et al JAMA 2008; JAMA Internal Medicine 2013

5) Define the concept of pay for performance. Then, evaluate its effectiveness in improving patient care thus far.

Pay-for-performance (P4P) is a remuneration strategy whereby clinicians, group practices, hospitals or healthcare organizations are paid differentially based on their performance on quality measures. The objectives of these programs are to provide incentives to healthcare providers to improve their quality of care and also to provide a source of revenue to support improvement activities. Various forms of P4P have become widespread over the past 15 years. For example, in 2005 more than half of HMOs (representing more than 80% of patients enrolled in HMOs) had some form of P4P in their provider contracts. Although P4P has been intuitively appealing to payers and is widespread, the effects of P4P on the quality of care are uncertain and the existing literature shows very mixed results. In cases where P4P was effective, the effects have tended to be modest and several studies have shown that P4P was not effective. Differences in the design elements of P4P programs (as discussed by Meredith Rosenthal and R. Adams Dudley may influence whether or not the programs are effective.

--Rosenthal MB, Dudley RA. Pay-for Performance: Will the Latest Payment Trend Improve Care. JAMA 2007; 297:740-743.
-- Houle SK1, McAlister FA, Jackevicius CA, Chuck AW, Tsuyuki RT. Does performance-based remuneration for individual health care practitioners affect patient care?: a systematic review. Ann Intern Med. 2012 Dec 18;157(12):889-99.

6) Compare how incentives to adopt team models for diabetes care differ between fee-for-service payment models and accountable care organization models.

After the power-point, students should understand that fee-for-service pays for volume: do x, you will be paid $x. Accountable care organization models provide incentives for improving quality of care by "sharing risk"- that is, by putting a certain amount of money on the line where physicians receive payment only if certain criteria are met (i.e. cost savings on re-admission for high risk patients, meeting quality metrics, etc.).

Hong et al discuss how ACO models improve incentives for healthcare systems to adopt chronic care management (CCM) approaches to high-risk patients. They note that the biggest barrier to adopting more CCM in a fee-for-service model is the difficulty in separating patient services into discrete, billable sections; additionally, for health systems that include hospitals, adopting models that minizmize hospitalization actually result in financial losses to the system despite improving patient health. Thus, there is no financial incentive to adopting these types of models, which require hiring additional team members who cannot bill in the model (i.e. pharmacists, nurses, and care managers). Students should extrapolate this to consider the resources they have discussed elsewhere to help improve their patients' diabetes care and quality measures, which also require paying salaries to team members who cannot bill in fee-for-service (ie. population managers who notify patients when they need visits/labs; registered dieticians; clinical pharmacists; CHWs, etc.). In an ACO model, there is incentive to hire additional team members who can help reduce admissions for high-risk diabetic patients and to provide improved quality of care given that these models typically also include incentive payments based on quality.

-Hong, CS, Abrams, MK, Ferris, TG. Toward Increased Adoption of Complex Care Management. NEJM 371 (6) 491-493)

7) Explore the reasons a provider may not prescribe a medication, even when clinically indicated. Define the term "Clinical Inertia." and reasons behind it.

> *Clinical inertia* is defined as the failure of health care providers to initiate or intensify therapy when indicated. Phillips et al. identified three major contributors to clinical inertia: overestimation of care provided; use of soft reasons to avoid treatment intensification; and lack of education, training, and practice organization aimed at achieving therapeutic goals. As a result, many patients do not achieve the level of control of their chronic conditions that was observed in clinical trials and therefore may not reap the full benefits of treatment.
>
> Using data from over 80,000 people with type 2 diabetes in a UK clinical practice research data repository from 2004 to 2011, Khunti et al found the median time to treatment intensification from an A1C reading of ≥ 8.0 was 1.6 years for those on one oral diabetes medication at baseline and was over 6.9 years for those on 2 oral diabetes medications. Depending on the number of oral meds at baseline, only 5-12% of those with poor glycemic control had treatment intensified to insulin therapy by the end of the observation period. Physician factors potentially contributing to treatment intensification decisions include concerns regarding risk of insulin in people with comorbidities, effects of insulin therapy on patient's quality of life, and concerns about patient's ability to carry out insulin therapy.
>
> There is no clear right or wrong answer to the question of when clinical inertia is justified. Ideally, students would come away from this discussion with an appreciation that most clinical encounters can be opportunities to advance towards treatment goals for chronic conditions, and clinical systems can be employed to make it easier for treatment intensification to occur. Sometimes though, it may not be appropriate to increase the treatment for uncontrolled chronic conditions because overriding unrelated issues need to be addressed or because substantial clinical uncertainty is present.
>
> *--Phillips LS1, Branch WT, Cook CB, Doyle JP, El-Kebbi IM, Gallina DL, Miller CD, Ziemer DC, Barnes CS. Clinical inertia. Ann Intern Med. 2001 Nov 6; 135(9): 825-34.*
> *--Khunti K, Wolden ML, Thorsted BL, Andersen M, Davies MJ. Clinical inertia in people with type 2 diabetes: a retrospective cohort study of more than 80,000 people. Diabetes Care. 2013;36:3411-3417.*

8) Describe a few reasons, beyond cost-related concerns, that a patient might decline insulin therapy. Include examples of health beliefs that may contribute to a patient's reluctance to start insulin therapy.

> Psychological insulin resistance (PIR) is defined as the psychological opposition towards insulin use and may be manifest by people with diabetes and/or their medical providers. As noted by Brod et al., "PIR represents a complex set of beliefs about the meaning of insulin therapy, poor self-efficacy concerning the skills needed for insulin therapy, fear of injections, and lack of accurate information."
>
> Resistance to initiating insulin therapy can be rooted in
> 1. Patients' beliefs and knowledge about diabetes and insulin
>   a. Common misperception: Insulin causes blindness, kidney failure, or amputations
>   b. Common belief: Use of insulin means their disease has become more severe, more serious, or that they have reached the end of the road

2. Attitudinal barriers
    a. Sense of personal failure or self-blame for needing insulin (e.g. insulin is a sign that they have "failed")
    b. Sense that insulin is a punishment for poor self-care
    c. Fear of injections: this can stem from fear of pain, anxiety about being able to learn the skill of self-injecting
3. Fear of side effects from insulin use
    a. Weight gain
    b. Hypoglycemia
4. Concerns about lifestyle changes that may come with insulin use
    a. Concern that insulin will lead to loss of freedom
    b. Concern that insulin injections will be too inconvenient or time consuming
5. Social stigma associated with insulin use

Polonsky and Jackson outline six similar factors that can contribute to psychological insulin resistance: 1. Association of insulin with a perceived loss of control over one's life 2. Lack of confidence that one can handle insulin therapy (i.e., take right dose at the right time) 3. Association of need for insulin treatment as a personal failure 4. Concern that the need for insulin means their diabetes is more severe or concern that insulin can lead to more health problems 5. Injection-related anxiety and 6. Perceived lack of positive gain from using insulin.

--Brod, M. Kongsø JH, Lessard S, Christensen TL. Psychological insulin resistance: patient beliefs and implications for diabetes management. Qual Life Res. 2009 Feb;18(1):23-32.
--Polonsky WH, Jackson RA: What's so tough about taking insulin? Addressing the problem of psychological insulin resistance in type 2 diabetes. Clinical Diabetes 22:147-150,2004

9) Define health literacy and health numeracy. Explain how low health literacy might affect a patient's ability to manage their diabetes. Describe how low health numeracy may affect a patient's ability to titrate insulin therapy in this example.

A basic definition of health literacy is "the ability to obtain, communicate, process, and understand basic health information and services to make appropriate health decisions." As applied to this patient's case, it is: a) her ability to obtain the appropriate advice on how to manage her poorly controlled diabetes, b) her ability to communicate with her provider about what she is doing for her diabetes care, c) her ability to understand and process the complex medication instructions given to her and d) the ability to apply this information in a manner that allows her to make active decisions about managing her health.

It is important to remember that educational attainment (the level of formal schooling obtained) does not perfectly correlate with health literacy level. It is possible to have a high level of formal education with a low health literacy level and vice versa.

The exact mechanism by which low health literacy may cause poor diabetes control and increased diabetes related complications is not clear. The study referenced is cross-sectional and only highlights correlations between low health literacy and poor diabetes control. That being said, low health literacy can be associated with depressive symptoms (which are known to worsen diabetes control), poor social support, low formal education, increased age, non-white race/ethnicity. In the study presented, each of these factors was adjusted for, indicating other mechanisms that might cause poor diabetes control. Hypotheses about mechanisms of poor diabetes control among those with low health literacy include that they do not: a) process oral instructions easily (e.g., if all of the visit instructions were given orally, the patient may not have heard, recalled or processed the medication

instructions provided), b) understand medication labels or written instructions easily, or c) correctly interpret health information or act on results even when given additional education.

As the article states, it is important to keep in mind that "The diabetes self-management regimen is one of the most challenging of any for chronic illness. Patients often must perform self-monitoring of blood glucose, manage multiple medications, visit multiple providers, maintain foot hygiene, adhere to diet and meal plans, and engage in an exercise program. Patients also must be able to identify when they are having problems across these functions and effectively problem-solve to divert crises, so diabetes outcomes may be especially sensitive to problems in communication, empowerment, and self-management."

Health numeracy is one aspect of health literacy and specifically refers to the "ability to understand and use numbers in everyday life." Again, this concept is related to ability to read and understand information, but is a distinct skill. Individuals with high literacy may still exhibit low numeracy and vice versa.

Low numeracy is common in the general population and is associated with lower levels of formal education. Again the literature regarding numeracy shows association and not causation, so the mechanism by which this would affect diabetes control and outcomes must be hypothesized. In this example, it could explain the patient's difficulty recognizing that her blood sugar of 180 is above the range of 70-130. Furthermore, it might be that she does not know how to titrate the dose of her insulin by 2 units every 3 days.

While best practices in communicating in a health literate and numerically appropriate way are still being devised, a few practical tips include: a) Providing a concrete example of how to change insulin dosing may be beneficial (If your blood sugar is around 180 for 3 or more days, increase your insulin dose from 10 units to 12 units), b) Asking patients call or email blood sugars in for providers to titrate, c) involving community health workers or peer coaches to assist with monitoring or titrating.

*--Dean Schillinger, MD; Kevin Grumbach, MD; John Piette, PhD; Frances Wang, MS; Dennis Osmond, PhD; Carolyn Daher, MPH; Jorge Palacios, MA; Gabriela Diaz Sullivan, MD; Andrew B. Bindman, MD **Association of Health Literacy With Diabetes Outcomes** JAMA. 2002; 288(4): 475-482. doi:10.1001/jama.288.4.475.*
*--Kerri Cavanaugh, MD, MHS; Mary Margaret Huizinga, MD, MPH; Kenneth A. Wallston, PhD; Tebeb Gebretsadik, MPH; Ayumi Shintani, PhD, MPH; Dianne Davis, RD, CDE; Rebecca Pratt Gregory, RD, CDE; Lynn Fuchs, PhD; Robb Malone, PharmD, CDE; Andrea Cherrington, MD, MPH; Michael Pignone, MD, MPH; Darren A. DeWalt, MD, MPH; Tom A. Elasy, MD, MPH; and Russell L. Rothman, MD, MPP **Association of Numeracy and Diabetes Control** Ann Intern Med. 2008;148(10):737-746. doi:10.7326/0003-4819-148-10-200805200-00006*

10) Define "community health workers" and "peer coaches". Explain how these types of care providers can be incorporated into clinical practice. Provide examples from the literature regarding glycemic control data in your discussion

Community health workers (CHWs) tend to be people from a given community who are hired to provide health education and teach patients chronic disease self-management. Health workers often visit patients in their homes and/or communicate regularly via telephone. CHWs typically *do not* have the chronic disease that they provide support for and they are usually paid by the healthcare system or community organization for their efforts (i.e. this is their full time job).

In contract, by definition, peer educators share the same disease as the patients who they work with. Diabetes peer educators are diabetic, etc. Peer educators often volunteer their time or receive a

small stipend for their efforts and often work with groups of patients at a time; there is some emerging data that this approach can be effective in improving glycemic control. One specific type of peer educator is a peer coach who works *individually* with patients (as opposed to teaching classes).

A systematic review of the effects of peer support on diabetes outcomes (covering studies published through 2011) showed inconsistent effects: 3 of 14 trials showed improvements in glycemic control, 1 of 4 in BP control, 1 of 6 in cholesterol control, 2 of 7 in weight loss, 2 of 5 in physical activity, 2 of 3 in self-efficacy, and 4 of 6 in depression. A few, but not all, RCTs published since the systematic review have had positive results. The study by Thom et al is one example.
In Thom et al, authors performed an RCT including diabetic patients recruited from San Francisco public health clinics affiliated with a public safety net hospital; all serve uninsured patients from diverse backgrounds. Coaches were recruited from the same population, with inclusion criteria necessitating that coaches have A1c levels <8.5%. Primary care physicians vetted the list of potential coaches and could exclude patients that were deemed inappropriate. A drop in HbA_{1c} level of 1.0% or more was seen in 49.6% patients in the coaching arm compared with 31.5% in the usual care arm (P=.001, adjusted), and 22.0% of patients in the coaching arm achieved an HbA_{1c} of less than 7.5% compared with 14.9% in the usual care arm (P=.04, adjusted). Additional studies are underway to determine the *coach* characteristics associated with higher likelihood of patient success.

In regards to the effects of community health workers on diabetes control, a recent systematic review and meta-analysis by Palmas et al showed an overall modest reduction in A1C compared to usual care (standardized mean difference in A1C 0.21 (95% CI 0.11-0.32).

--Dale JR, Williams SM, and Bowyer V. What is the effect of peer support on diabetes outcomes in adults? A systematic review. Diabet Med. 2012;29(11):1361-77.
--Thom DH et al. Impact of Peer Health Coaching on Glyce- mic Control in Low-Income Patients With Diabetes: A Randomized Controlled Trial. Ann Fam Med 2013;11:137-144. doi:10.1370/afm.1443.
--Palmas W, March D, Darakjy S et al. Community Health Worker Interventions to Improve Glycemic Control in People with Diabetes: A Systematic Review and Meta-Analysis. J Gen Intern Med. 2015;30(7):1004-12.

GROUP PAPER ASSIGNMENT: LAST STEP (45 MINUTES)

C1.

There are three parts to this exercise: one systems case and two patient cases. Each case is followed by questions that you should address in your paper. You may choose to split your group into three parts to accomplish the writing of the paper most efficiently, however, all members of your group are responsible for the final product and for the knowledge gained from writing all three portions. Comparing and contrasting your approach to the two patient cases is highly recommended. You should also link the decisions made in the System Case with your solutions in the Patient Cases, since both patients are cared for in Dr. Cordero's medical practice. Use what you learned from each other in the Learning Issue discussions to complete this paper. Be thorough and thoughtful in your write-ups, illustrating your understanding of the key concepts in the overall Learning Objectives.

Submission Instructions: Please compile all three parts (one systems case, 2 patient cases) into one report with your group number and team member names. Please type this and submit it as one document by email by 10pm on Friday, December 8, 2017 to Ciara Noel *(*ciara.noel@northwestern.edu*)*

System Case:
After the initial practice meeting (on day 1), Dr. Cordero's group decides that they will become part of the pilot group for Major Insurance Company in their new Shared Savings Model plan. While the group has been doing well on most important metrics, Dr. Welsh, the practice director, notes that the physician group as a whole is performing below the necessary benchmarks for Major Insurance Company in two areas: adequate glycemic control for diabetic patients (only 55% of the patients in the practice have a Hemoglobin A1c <8.0). The group also is not meeting the metric for percentage of patients either on an ACE inhibitor or with a microalbumin check in the past year.

You are now part of the strategic planning committee for the practice. Provide a plan for how the practice will go about improving diabetes care quality in both of these measures, noting which measure is a process measure and which is an intermediate outcome measure. Explain why your group has chosen the approach for each measure. Indicate how the changes in practice financing will impact your ability to carry out your plan.

Patient Case: Michael Warner
Michael Warner is a 52 y/o man who comes in for follow-up diabetes visit. You last saw him almost one year ago, in January 2014. At that time, his hemoglobin A1c was 9.7; you recommended adjustments to his insulin regimen and that he come back in 8 weeks for a follow-up visit to adjust his insulin. However, he works for Union Pacific in rail management, which requires frequent last minute travel. He cancelled the 8-week visit and forgot to reschedule the visit. You note that his blood pressure is at goal on Lisinopril 20mg daily and his last LDL cholesterol was 85 while taking Atorvastatin. A point-of-care hemoglobin A1c obtained by the nurse at the beginning of today's visit reveals a hemoglobin A1c of 10.1.

Patient Case: Sally Rafa
Sally Rafa is a 59 year old woman who was recently seen in the office for a diabetes follow-up visit. Since being diagnosed with diabetes two years ago, she has made several lifestyle changes including exercising regularly and eating out less. She also takes metformin every day for her diabetes and her A1C has come down from 8.5 to 7.2. She does not take any other medications. Her last office blood pressure was 135/80 which is pretty close to the blood pressures results she has obtained when she checks her blood pressure at the drug store once or twice a month. She has had a foot exam and seen the eye doctor within the past year. Her last test to screen for microalbuminuria was almost two years ago. Despite her best efforts to eat a diet that is low in fat, her LDL cholesterol has not improved much and was 134 on last check a few months ago. She has told you several times that she really does not like taking pills and prefers to use natural treatments. You recommended starting a statin at her last visit but she declined because she has heard from many of her friends that the cholesterol lowering medications are very dangerous. She feels confident that with stricter dietary monitoring, she can get her cholesterol down.

For each patient, list the factors that serve as barriers to adherence. What improvement techniques and/or team structure changes are needed to overcome these barriers for each patient? Include all changes you feel are appropriate without including changes that would not likely impact this patient. Include 3-4 sentences of "patient instructions" for each patient that explains your plan, taking care to consider health literacy in your instructions (aim for 8th grade level).

C1 FACILITATORS' GUIDE ANNOTATIONS

Students should complete this exercise independently. You may wish to observe the interactions of the team while completing this assignment to assist in your suggestions/comments and overall group assessment that you will complete at the end of today's session.

GROUP GRADING RUBRIC:

Available via link that will be mailed to you by Ciara Noel.

<u>When completing this form, consider the following:</u>
What does a good group that is working together look like?
- All members are engaged
- Team members readily volunteer for learning issues
- Team members prepare their LIs in detail and use methods to share the information clearly in the 5-7 minutes allotted/group member.
-Team members use appropriate resources to complete the LIs**, including the references provided by the care authors.**

Please select the box that best describes the characteristics of the entire group that you are facilitating. If the group displays some characteristics from two boxes, choose the middle column.

See next page for the detailed rubric.

Learning Activity	**DOC Groups**
Module	**Endocrine**
Assessment	**Faculty Assessment of Group Teamwork**

Date	
Evaluator Name	
Student Name	

When completing this form, consider the following:

What does a good group that is working together look like?

- All members are engaged
- Team members readily volunteer for learning issues
- Team members prepare their LIs in detail and use methods to share the information clearly in the 5-7 minutes allotted/group member.
- Team members use appropriate resources to complete the LIs, including the references provided by the care authors.

Please select the box that best describes the characteristics of the entire group that you are facilitating.

System Awareness and Team-Based Care

SATBC-2b Demonstrate positive teamwork attitudes and skills during coursework, clinical care, and research activities.

For this exercise, a group working together will demonstrate "team orientation"—working together to help each other learn the material. They will provide each other feedback to each other if needed to keep the group on track. They demonstrate engagement and interest in the efforts of all members of the group.

1 ◯	2 ◯	3 ◯	4 ◯	5 ◯	6 ◯	7 ◯	8	9
• Group does not engage on how to improve the teamwork paper process. • The group requires significant facilitator involvement to engage in the discussion. • Group members make few contributions to the discussion. • Group members display indifference during other students' presentations, (i.e. checking emails or having frequent sidebars)	• Minimal group reflection on how to improve the teamwork paper process; few meaningful suggestions for improvement. • The group sometimes engages in independent discussion of the case, but often requires the facilitator to bring up key points. • A few student contribute to the discussion in meaningful ways		• Group reflection on teamwork paper process yields a plan for improving the process of writing the paper for this session • The group maintains discussion for the most part, only occasionally requiring redirection from the facilitator. • Almost all students contribute equally to the discussion • Most students display active listening skills during LI presentations.			• Group reflection on teamwork paper process yields a plan for improving the process of writing the paper for this session • All members try to meaningfully contribute to the group effort. • Students ask each other questions, invite less participatory members of the group to share their thoughts. • All members are engaged during LI presentations, ask		N/A

	• Some group members are attentive during LI presentations, but others appear indifferent		questions of each other.

PROFESSIONAL BEHAVIOR AND MORAL REASONING

PBMR-5 Behave with accountability and dependability.								
Accountability to each other and to each others' learning								
1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○	8	9
• Several group members are late • More than 1-2 members are poorly prepared with their LIs	• Some group members are late • 1-2 students are unprepared for LI presentations		• Almost all group members are prepared and on time. • Almost all LI presentations are well prepared			• All group members are on time for both sessions. • All group members are well prepared for LI presentations		N/A

CONTINUOUS LEARNING AND QUALITY IMPROVEMENT

CLQI-3a Retrieve, analyze and critically appraise literature.								
Group skill : Learning Issue Preparation – Information Literacy								
1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○	8	9
• More than 1 group member used inappropriate information technology to develop LI presentation (used Wikipedia or non-medical websites). • More than one group member did not cite sources.	• Group members used the sources recommended by the facilitators, but clearly skimmed and did not understand issues. • Occasionally cited sources without prompting		• Most group members used the sources recommended by the facilitators, they may miss 1 or 2 important points • Cited sources consistently.			• All group members used sources recommended by facilitators, highlighting critical points for colleagues • Some group members may have identified additional relevant sources that added to group discussion.		N/A

POSITIVE OBSERVATIONS:

SUGGESTIONS FOR IMPROVEMENT:

Diabetes Care Delivery: From Patient to Panel
Student Guide

LEARNING OBJECTIVES
1. Evaluate how different payment models can impact the organization of patient care.
2. Compare team structures and team members who provide care in chronic disease management.
3. Explain how health belief models can influence patient acceptance of recommended care.
4. Define and apply health literacy and numeracy to patient cases.
5. Compare and contrast methods to improve process versus outcome measures in chronic disease management.
6. Evaluate the use of quality improvement techniques applied to diabetes care.

Day One, Part One: Panel Management
Spend ~50 minutes on this content

You will receive a separate document containing Dr. Cordero's Quarterly Quality Report.

A1. Caring for Populations

Dr. Maria Cordero is a primary care physician practicing with Primary Care Group. She cares for 1800 patients, and has approximately 640 patients with diabetes in her panel. Attached, you will find the first page of her quarterly diabetes panel report. This shows how well her panel as a whole is doing meeting certain criteria associated with diabetes care. These metrics are based on 2014 Healthcare Effectiveness Data and Information Set (HEDIS) criteria.

In your groups, first identify which measures are consistent with *process measures* and which are most consistent with *outcome measures*. Then, discuss which measures Dr. Cordero seems to be achieving most easily and which are more challenging. Why do you think that is the case?

Why do you think Dr. Cordero receives these reports? Can you come up with pros and cons to this type of system? Also, discuss with your facilitator how easy or difficult it is for them to get process or outcome metrics related to the care of the patients they take care of. Reflect back to your HQPS site visit goal regarding the barriers to receiving and responding to clinical quality data and discuss as a small group.

A2. Caring for Populations

Once a month, Dr. Cordero's practice group has a meeting to discuss upcoming changes to the practice environment led by Dr. Karen Welsh, the medical director of the practice. Dr. Welsh presents the overall practice's metrics regarding diabetes care and notes that they are well below the national average.   She notes that the healthcare system you are part of is considering being part of a pilot project that includes changes in both the team structure and the way that your group receives payment from insurance companies.

Your group has always been paid based on "fee for service" and now she is proposing that you work with an insurance company to pilot a "shared savings model" that is considered typical for new "accountable care organizations." A colleague suggests that this sounds similar to prior efforts to implement "pay for performance" models of care and doesn't like the idea.

First, discuss what team changes might help improve care for your patients with diabetes. Then, share what you know about the payment models above. Your facilitator will give a brief presentation on the different models so you have a better understanding of this data.

Day One, Part Two: Patient Chronic Disease Management
Spend ~50 minutes on this content

B1. Beginning of case

Kathryn Jones is a 41 year old woman who returns for a follow up visit to discuss her Type 2 Diabetes. At her last visit 3 months ago, you discussed her poor diabetes control. At that time, given her hemoglobin A1c of 11, you had recommended that she begin insulin glargine. She declined and wanted to continue on her metformin and glipizide while making additional changes to her diet and physical activity.

Past Medical History:
Hypertension
Diabetes
Hyperlipidemia
Abnormal Pap smear (HGSIL) March 2014

Medications:
Metformin 1000 mg twice daily
Glipizide Extended Release 10 mg daily
Lisinopril 20 mg daily
Atorvastatin 40 mg daily

Allergies:
No known drug allergies

Social History:
Lives with her 2 children ages 15 and 17 years. She graduated high school and works as a cashier at the local grocery store. No tobacco. Drinks 1 glass of wine per month.

Family History:
Mother with Type 2 diabetes, deceased age 66.

Physical Exam:
Temp 98.6 F, HR 72, RR 10, BP 132/78, Weight 120 lbs, Height 4 feet 9 inches
Gen: comfortable appearing
CV: regular rhythm, normal S1, S2, no m/r/g
Lungs: clear to auscultation bilaterally
Abd: soft, non-tender, non-distended, normoactive bowel sounds
Ext: sensation to monofilament intact in lower extremities bilaterally, +2 dorsalis pedis pulses bilaterally, skin without breakdown or callous formation.

B2.

On review of her health record, you note that she has had A1cs >10 for the last 18 months. She has returned for visits every 3 months for follow up during this time.

B3.

In further conversation, the patient reveals that insulin made her mother really sick and she worries that it will do the same to her.   Soon after her mother started insulin, her kidney failure worsened, she started hemodialysis, and she died within 2 years of starting dialysis from a blood stream infection.

B4.

After extensive discussion, she agrees to try insulin therapy. You stop her glipizide, continue her metformin 1000 twice daily and initiate insulin glargine 10 units nightly. You advise her to check her fasting blood sugar daily with a target of 70-130 mg/dL. You recommend she increase her insulin by 2 units every 3 days until her fasting blood sugars are in the target range.

Upon returning 12 weeks later, she states, "My blood sugars are great!" You review her blood sugar log, which she proudly displays. Her fasting blood sugars range from 170-200 fasting. She states she is taking insulin, just as you had recommended, 10 units nightly. Furthermore, she stopped both her glipizide and metformin when she started her insulin.

B5.

After realizing that the patient requires more support with diabetes education and management, you look into potential resources available to this patient. Your social worker mentions that the practice has just started a peer coaching initiative. There are also classes run by community health educators that the patient can attend. She reports that there are 2 available options, peer coaching for diabetes and community health workers for diabetes. You have heard a little bit about each one, but need to decide which you would choose for Ms. Jones.

LEARNING ISSUES AND REFERENCE LIST

1) Summarize the scientific limitations to the intermediate biological outcomes that have been used to assess the quality of care (i.e. blood pressure <140/90 mmHg at the last visit in the measurement period or A1c <8.0).

> *--Pogach L1, Engelgau M, Aron D. Measuring progress toward achieving hemoglobin A1c goals in diabetes care: pass/fail or partial credit. JAMA. 2007 Feb 7;297(5):520-3.*
> *--Kerr EA1, Lucatorto MA, Holleman R, Hogan MM, Klamerus ML, Hofer TP; Monitoring performance for blood pressure management among patients with diabetes mellitus: too much of a good thing? VA Diabetes Quality Enhancement Research Initiative (QUERI) Workgroup on Clinical Action Measures. Arch Intern Med. 2012 Jun 25;172(12):938-45.*

2) Compare which quality improvement strategies have been shown to be effective for improving processes of care (i.e. A1c testing, eye exams, vaccinations, or nephropathy screening) to those that are effective in improving biological outcomes for chronic conditions (i.e. A1c level and blood pressure control). *Students should be selective in their use of the following references to answer these questions and do not need to read each paper in its entirety*

> *--Scott I. What are the most effective strategies for improving quality and safety of health care? Intern Med J. 2009;39:389-400.*
> *--Tricco AC, Ivers NM, Grimshaw JM, Moher D, Turner L, Galipeau J, Halperin I, Vachon B, Ramsay T, Manns B, Tonelli M, Shojania K. Effectiveness of quality improvement strategies on the management of diabetes: a systematic review and meta-analysis. Lancet. 2012 Jun 16; 379(9833)2252-61.*
> *--Bright TJ1, Wong A, Dhurjati R, Bristow E, Bastian L, Coeytaux RR, Samsa G, Hasselblad V, Williams JW, Musty MD, Wing L, Kendrick AS, Sanders GD, Lobach D. Effect of clinical decision-support systems: a systematic review. Ann Intern Med. 2012 Jul 3;157(1):29-43. doi: 10.7326/0003-4819-157-1-201207030-00450.*
> *--Audit and feedback: effects on professional practice and healthcare outcomes. Cochrane Database Syst Rev. 2012 Jun 13;6:CD000259. doi: 10.1002/14651858.CD000259.*

3) Describe the potential undesirable consequences of providing doctors financial incentives for the A1c results they achieve or of public reporting of those results.

> *--Casalino L1, Alexander GC, Jin L, Konetzka RT. General internists' views on pay-for-performance and public reporting of quality scores: a national survey. Health Aff. 2007 Mar-Apr;26(2):492-9.*
> *--Wharam JF, Paasche-Orlow MK, Farber NJ, Sinsky C, Rucker L, Rask KJ, Figaro MK, Braddock C 3rd, Barry MJ, Sulmasy DP. High quality care and ethical pay-for-performance: a Society of General Internal Medicine policy analysis. J Gen Intern Med. 2009 Jul;24(7):854-9. doi: 10.1007/s11606-009-0947-3. Epub 2009 Mar 18.*
> *-- Hibbard JH, Greene J, Sacks R, Overton V. Does Compensating Primary Care Providers to Produce Higher Quality Make Them More or Less Patient Centric? Med Care Res Rev. 2015 Aug;72(4):481-95.*

4) Outline at least one example of how team structure can be designed to improve patient chronic disease management.

> *-Bodenheimer, T. Transforming Practice. NEJM 359 (20): 2086-2089*
> *-Green BB, et al JAMA 2008; JAMA Internal Medicine 2013*

5) Define the concept of pay for performance. Then, evaluate its effectiveness in improving patient care thus far.

> *--Rosenthal MB, Dudley RA. Pay-for Performance: Will the Latest Payment Trend Improve Care. JAMA 2007; 297:740-743.*

--Houle SK1, McAlister FA, Jackevicius CA, Chuck AW, Tsuyuki RT. Does performance-based remuneration for individual health care practitioners affect patient care?: a systematic review. Ann Intern Med. 2012 Dec 18;157(12):889-99.

6) Compare how incentives to adopt team models for diabetes care differ between fee-for-service payment models and accountable care organization models.

-Hong, CS, Abrams, MK, Ferris, TG. Toward Increased Adoption of Complex Care Management. NEJM 371 (6) 491-493)

7) Explore the reasons a provider may not prescribe a medication, even when clinically indicated. Define the term "Clinical Inertia." and reasons behind it.

--Phillips LS, Branch WT, Cook CB, Doyle JP, El-Kebbi IM, Gallina DL, Miller CD, Ziemer DC, Barnes CS. Clinical inertia. Ann Intern Med. 2001 Nov 6;135(9):825-34.
--Khunti K, Wolden ML, Thorsted BL, Andersen M, Davies MJ. Clinical inertia in people with type 2 diabetes: a retrospective cohort study of more than 80,000 people. Diabetes Care. 2013;36:3411-3417.

8) Describe a few reasons, beyond cost-related concerns, that a patient might decline insulin therapy. Include examples of health beliefs that may contribute to a patient's reluctance to start insulin therapy.

--Brod, M. Kongsø JH, Lessard S, Christensen TL. Psychological insulin resistance: patient beliefs and implications for diabetes management. Qual Life Res. 2009 Feb;18(1):23-32.
-- Polonsky WH, Jackson RA: What's so tough about taking insulin? Addressing the problem of psychological insulin resistance in type 2 diabetes. Clinical Diabetes 22:147-150,2004.

9) Define health literacy and health numeracy. Explain how low health literacy might affect a patient's ability to manage their diabetes. Describe how low health numeracy may affect a patient's ability to titrate insulin therapy in this example.

*--Dean Schillinger, MD; Kevin Grumbach, MD; John Piette, PhD; Frances Wang, MS; Dennis Osmond, PhD; Carolyn Daher, MPH; Jorge Palacios, MA; Gabriela Diaz Sullivan, MD; Andrew B. Bindman, MD **Association of Health Literacy With Diabetes Outcomes** JAMA. 2002;288(4):475-482. doi:10.1001/jama.288.4.475.*
*--Kerri Cavanaugh, MD, MHS; Mary Margaret Huizinga, MD, MPH; Kenneth A. Wallston, PhD; Tebeb Gebretsadik, MPH; Ayumi Shintani, PhD, MPH; Dianne Davis, RD, CDE; Rebecca Pratt Gregory, RD, CDE; Lynn Fuchs, PhD; Robb Malone, PharmD, CDE; Andrea Cherrington, MD, MPH; Michael Pignone, MD, MPH; Darren A. DeWalt, MD, MPH; Tom A. Elasy, MD, MPH; and Russell L. Rothman, MD, MPP **Association of Numeracy and Diabetes Control**   Ann Intern Med. 2008;148(10):737-746. doi:10.7326/0003-4819-148-10-200805200-00006*

10) Define "community health workers" and "peer coaches". Explain how these types of care providers can be incorporated into clinical practice. Provide examples from the literature regarding glycemic control data in your discussion

--Dale JR, Williams SM, and Bowyer V. What is the effect of peer support on diabetes outcomes in adults? A systematic review. Diabet Med. 2012;29(11):1361-77.
--Thom DH et al. Impact of Peer Health Coaching on Glyce- mic Control in Low-Income Patients With Diabetes: A Randomized Controlled Trial. Ann Fam Med 2013;11:137-144. doi:10.1370/afm.1443.
--Palmas W, March D, Darakjy S et al. Community Health Worker Interventions to Improve Glycemic Control in People with Diabetes: A Systematic Review and Meta-Analysis. J Gen Intern Med. 2015;30(7):1004-12.

GROUP PAPER ASSIGNMENT: LAST STEP (45 MINUTES)

C1.

There are three parts to this exercise: one systems case and two patient cases. Each case is followed by questions that you should address in your paper.   You may choose to split your group into three parts to accomplish the writing of the paper most efficiently, however, all members of your group are responsible for the final product and for the knowledge gained from writing all three portions. Comparing and contrasting your approach to the two patient cases is highly recommended. You should also link the decisions made in the System Case with your solutions in the Patient Cases, since both patients are cared for in Dr. Cordero's medical practice. Use what you learned from each other in the Learning Issue discussions to complete this paper. Be thorough and thoughtful in your write-ups, illustrating your understanding of the key concepts in the overall Learning Objectives.

Submission Instructions: Please compile all three parts (one systems case, 2 patient cases) into one report with your group number and team member names. Please type this and submit it by email by 10 pm on Friday, December 8, 2016 to Ciara Noel *(ciara.noel@northwestern.edu).*

System Case:
After the initial practice meeting (on day 1), Dr. Cordero's group decides that they will become part of the pilot group for Major Insurance Company in their new Shared Savings Model plan. While the group has been doing well on most important metrics, Dr. Walsh, the practice director, notes that the physician group as a whole is performing below the necessary benchmarks for Major Insurance Company in two areas: adequate glycemic control for diabetic patients (only 55% of the patients in the practice have a Hemoglobin A1c <8.0). The group also is not meeting the metric for percentage of patients either on an ACEI or with a microalbumin check in the past year.

You are now part of the strategic planning committee for the practice. Provide a plan for how the practice will go about improving diabetes care quality in both of these measures, noting which measure is a process measure and which is an intermediate outcome measure. Explain why your group has chosen the approach for each measure. Indicate how the changes in practice financing will impact your ability to carry out your plan.

Patient Case: Michael Warner
Michael Warner is a 52 y/o man who comes in for follow-up diabetes visit. You last saw him almost one year ago, in January 2014. At that time, his hemoglobin A1c was 9.7; you recommended adjustments to his insulin regimen and that he come back in 8 weeks for a follow-up visit to adjust his insulin. However, he works for Union Pacific in rail management, which requires frequent last minute travel. He cancelled the 8-week visit and forgot to reschedule the visit. You note that his blood pressure is at goal on Lisinopril 20mg daily and his last LDL cholesterol was 85 while taking Atorvastatin. A point-of-care hemoglobin A1c obtained by the nurse at the beginning of today's visit reveals a hemoglobin A1c of 10.1.

Patient Case: Sally Rafa
Sally Rafa is a 59 year old woman who was recently seen in the office for a diabetes follow-up visit. Since being diagnosed with diabetes two years ago, she has made several lifestyle changes including exercising regularly and eating out less. She also takes metformin every day for her diabetes and her A1C has come down from 8.5 to 7.2. She does not take any other medications. Her last office blood pressure was 135/80 which is pretty close to the blood pressures results she has obtained when she checks her blood pressure at the drug store once or twice a month. She has had a foot exam and seen the eye doctor

within the past year. Her last test to screen for microalbuminuria was almost two years ago. Despite her best efforts to eat a diet that is low in fat, her LDL cholesterol has not improved much and was 134 on last check a few months ago. She has told you several times that she really does not like taking pills and prefers to use natural treatments. You recommended starting a statin at her last visit but she declined because she has heard from many of her friends that the cholesterol lowering medications are very dangerous. She feels confident that with stricter dietary monitoring, she can get her cholesterol down.

For each patient, list the factors that serve as barriers to adherence. What improvement techniques and/or team structure changes are needed to overcome these barriers for each patient? Include all changes you feel are appropriate without including changes that would not likely impact this patient. Include 3-4 sentences of "patient instructions" for each patient that explains your plan, taking care to consider health literacy in your instructions (aim for 8th grade level).

Course	**Endocrine**
Unit	**DOC [BOM, TL, HEA, HQPS]**
Assessment	**Group Paper**

Date	
Evaluator Name	
Name	

CONTINUOUS LEARNING AND QUALITY IMPROVEMENT

SATBC-1
Describe healthcare finance and delivery in various healthcare systems, and demonstrate the ability to effectively call on system resources to provide care that is of optimal value.
For this small group exercise, students will compare fee-for-service and ACO models and how this impacts the structure of chronic care.

1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○	8 ○	9 ○
Critical deficiencies in comparing ACO and fee-for-service care; fails to apply payment model to patient care.	Defines ACO and fee-for-service payment models but application to patient care structures has critical deficiencies.		Clearly defines ACO and fee-for-service payment models. Provides a superficial but correct application to patient care.			Clearly defines ACO and fee-for-service payment models and provides detailed analysis of application to patient care.		N/A

CLQI-4
Demonstrate quality improvement knowledge and skill.
Students are told to consider how to implement changes to the clinic to improve both process and outcome measures using appropriate methods.

1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○	8 ○	9 ○
Students misidentify process and outcome measures.	Students identify process and outcome measures correctly, but apply incorrect concepts for quality improvement.		Students correctly identify process and outcome measures. Discussion of quality improvement concepts is correct but superficial.			Students correctly identify process and outcome measures. Discussion of quality improvement concepts is detailed and correct and displays thorough understanding of key concepts.		N/A

CES-2
Assess challenges to providing high quality health care for members of vulnerable groups and articulate the role of physicians in working to eliminate barriers.
For this small group exercise, students will assess patient cases and apply concepts of health literacy/numeracy and health belief model

1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○	8 ○	9 ○
Students do not apply concepts of health belief model or numeracy/literacy.	Students mention health belief model or health literacy/numeracy in their analysis, but only superficially.		Students adequately consider how health belief model or health literacy/numeracy impacts diabetes care.			Students discuss how health belief model and health literacy/numeracy impact diabetes care in a detailed and thoughtful manner that demonstrates full		N/A

			understanding of concepts.	

GROUP GRADING RUBRIC:

The following rubric was provided to your group facilitator to assess your group's teamwork.

When completing this form, consider the following:

What does a good group that is working together look like?

- All members are engaged
- Team members readily volunteer for learning issues
- Team members prepare their LIs in detail and use methods to share the information clearly in the 5-7 minutes allotted/group member.
-Team members use appropriate resources to complete the LIs**, including the references provided by the care authors.**

Please select the box that best describes the characteristics of the entire group that you are facilitating. If the group displays some characteristics from two boxes, choose the middle column.

See next page for the detailed rubric.

Learning Activity	**DOC Groups**
Module	**Head and Neck Endocrine Hematology/Oncology**
Assessment	**Faculty Assessment of Group Teamwork**

Date	
Evaluator Name	
Student Name	

When completing this form, consider the following:

What does a good group that is working together look like?

- All members are engaged
- Team members readily volunteer for learning issues (Lis)
- Team members prepare their LIs in detail and use methods to share the information clearly in the 5-7 minutes allotted/group member.
-Team members use appropriate resources to complete the LIs, **including the references provided by the care authors.**

SYSTEM AWARENESS AND TEAM-BASED CARE

SATBC-2	Demonstrate a clear understanding of healthcare team goals, primary roles of team members, and **work effectively to help the team achieve its goals.**

For this exercise, a group working together will demonstrate "team orientation"—working together to help each other learn the material. They will provide each other feedback to each other if needed to keep the group on track. They demonstrate engagement and interest in the efforts of all members of the group.

1 ◯	2 3 ◯ ◯	4 5 6 ◯ ◯ ◯	7 ◯	
• The group requires significant facilitator involvement to engage in the discussion. • Group members make few contributions to the discussion. • Group members display indifference during other students' presentations, (i.e. checking emails or having frequent sidebars)	• The group sometimes engages in independent discussion of the case, but often requires the facilitator to bring up key points. • A few student contribute to the discussion in meaningful ways • Some group members are attentive during LI presentations, but others appear indifferent	• The group maintains discussion for the most part, occasionally requiring redirection from the facilitator. • Almost all students contribute equally to the discussion • Most students display active listening skills during LI presentations.	• Nearly all try to meaningfully contribute to the group effort. • Students ask each other questions, invite less participatory members of the group to share their thoughts. • All members are engaged during LI presentations, ask questions of each other.	N/A

PROFESSIONAL BEHAVIOR AND MORAL REASONING

PBMR-5 Behave with accountability and dependability.				
Accountability to each other and to each others' learning				
1 ○	2 ○ 3 ○	4 ○ 5 ○ 6 ○	7 ○	
• Several group members are late • More than 1-2 members are poorly prepared with their LIs • Many members are disengaged in the learning process.	• Some group members are late • 1-2 students are unprepared for LI presentations	• Almost all group members are prepared and on time. • Almost all LI presentations are well prepared	• All group members are on time for both sessions. • All group members are well prepared for LI presentations	N/A

CONTINUOUS LEARNING AND QUALITY IMPROVEMENT

CLQI-3b Use information technology obtain information needed for effective self-learning and peer education.				
Group skill : Learning Issue Preparation – Information Literacy				
1 ○	2 ○ 3 ○	4 ○ 5 ○ 6 ○	7 ○	
• More than 1 group member used inappropriate information technology to develop LI presentation (used Wikipedia or non-medical websites). • More than one group member did not cite sources.	• Group members used the sources recommended by the facilitators, but clearly skimmed and did not understand issues. • Occasionally cited sources without prompting	• Most group members used the sources recommended by the facilitators, they may miss 1 or 2 important points • Cited sources consistently.	• All group members used all the sources recommended by facilitators and highlighted critical points for colleagues	N/A

POSITIVE OBSERVATIONS:

SUGGESTIONS FOR IMPROVEMENT: