Systems Based Practice

Introduction

So what exactly is it?

Systems Based Practice refers to all the processes in the health care system that operate to provide cost effective care to individual patients and to populations. It includes the appointment system and referral process all the way to the governmental organization of health care.

The official line from the ACGME (Accreditation Council for Graduate Medical Education) is “Students must demonstrate an awareness of and responsiveness to the larger context and systems of health care and the ability to call on system resources to provide care that is of optimal value”.

Systems based practice can be easy to overlook as a medical student as it focuses on aspects of the team approach to patient care to which you may have had little exposure. Furthermore, it addresses systems for patient care (e.g. type of medical coverage, health care resources, home resources, and cultural needs) that can seem peripheral on a busy inpatient service with extremely sick patients. However, they are ultimately critical to successful patient care and to running a medical practice. An ideal health care delivery system optimizes both resources and outcomes. It promotes a basic understanding of the complex operational, regulatory, and fiscal parameters of the various hospital and health care systems (i.e. the connections between patients, providers, payors, and governing bodies). Your operational understanding of SBP will ultimately guide your practice and highlight systemic improvements that can be made to enhance the safety, efficiency, access, cost, and overall patient and provider experience.

All residency programs have a learning requirement for systems based practice (it is an ACGME competency), so you will have a head start.

System Based Practice includes:

1. Safety and quality in health care
2. Physician advocacy
3. Health insurance
4. Health care economics
5. Transitions of care
6. Different health care systems
7. Pay for performance
8. Patient centered medical home
9. Chronic Care
Instructions

1. There are 9 modules in this workbook. Please look at all of them. To fulfill the systems based practice course requirements, you have to do two activities and one project. For each activity write approximately one page (double spaced) describing what you found. You can complete these activities in the blank forms that appear on your “To dos” list in one45.

2. Choose one of the projects to complete (from any of the 9 modules), or you can do a project of your own choice related to any topic in systems based practice. If you have any questions about your project, please e-mail Dr. Sarah Smithson (Sarah_Smithson@med.unc.edu). Write a 2 page report which can also be done through one45. Your research and write-up should be more developed than for the activities.

3. Complete the online course L 101: Becoming a Leader in Health Care on the Institute for Health Improvement (IHI) Website
https://www.ihi.org/_layouts/ihi/login/Login.aspx?returnUrl=http%3a%2f%2fapp.ihi.org%2flms%2fhome.aspx%3fCatalogGuid%3d1431fa43-38e4-4e40-ab3b-7887d3254f72

You will need to register to take the course. When you have completed the 5 sections and done the evaluation click on box that says “back to course detail” and then create your certificate and send to Reid Johnson (reid_johnson@med.unc.edu) as an attachment to confirm you have completed and passed the course.

Please complete one module per week. Do not leave them all until the end. The modules, IHI certificate and project are all due one week after the course finishes*. At the end of that week, the forms will disappear from your inbox on One45.

*Graduating students in Block 10 must complete their modules and project by the Tuesday after their course finishes.

If any of the links to the readings or websites do not work please let Sarah Smithson know.

Welcome,

Sarah
Module 1 – Safety and Quality Improvement (QI) in Health Care

Goal: Explore systems to improve quality and avoid medical error

“Bad systems, not bad people, lead to the majority of errors and injuries.”

Quality and Safety is crucially important to every physician’s practice. Most errors are due to system failures rather than incompetent physicians. Good systems in place can protect physicians and patients from the consequences of errors. In 2000, the Institute of Medicine published a document called “To Err is Human” highlighting the number of medical errors that occur annually in the United States. Medical error is the fifth leading cause of death in the U.S. (2009). Since the publication of this document, there has been an emphasis on improving systems to avoid errors. In your practice, you should be able to observe many systems that have been put in place to avoid serious errors, such as a system to follow up on abnormal pap smears or mammograms.

We are continually striving to improve the quality of health care. To do this, we need to review and improve the systems used to provide the care. The PDSA (plan, do, study, act) cycle is a commonly used QI method of continuous improvement. Although it may not be referred to as this in your practice, if you look around, you will find PDSA in action. Please read reference #1 for an overview of QI in healthcare.

Joint Commission on Accreditation of Health care Organizations (JCAHO)
The new name for the organization is simply “The Joint Commission”, although you will still hear it referred to as JCAHO (“jay-co”). There are numerous organizations that provide accreditation to health care facilities but the largest, and the one recognized for Medicaid and Medicare payments, is the Joint Commission. Here at UNC, we use the Joint Commission for accreditation of the hospital every 3 years. The accountability measures that are important for accreditation are available on the Joint Commission website: http://www.jointcommission.org/accountability_measures.aspx

Gaining accreditation means we can be assured of receiving Medicaid and Medicare payments along with payments from other insurers who require accreditation of healthcare facilities. Some states, such as Pennsylvania and Wisconsin, have set up their own accreditation organizations. Whether you work in a hospital or a clinic, you will become familiar with the Joint Commission. You have probably already heard people talk, sometimes with dread, of impending visits.

Sponsored by the Joint Commission, the Surgical Care Improvement Project (SCIP) is a national quality partnership of organizations interested in improving surgical care by significantly reducing surgical complications. SCIP Partners
include the Steering Committee of 10 national organizations who have pledged their commitment and full support for SCIP. You can learn more about SCIP at this link: http://www.jointcommission.org/surgical_care_improvement_project/

As hospitals have improved their Surgical Care quality, the SCIP measurements have evolved. Fewer SCIP measures are currently required; however, some hospitals continue to follow certain SCIP measures if they have a positive impact on patient outcomes.

What underlies quality Improvement?

The process of quality improvement is driven by supporting innovation, evaluating quality improvement systems, rapid-cycle learning, and disseminating evidence about what works. A hallmark is small, rapid change.

The best way to improve health care quality is to help health professionals evaluate their own performance and their colleagues' performance, quickly learn how interventions fare in the "real world," and see the benefits of innovation firsthand—and then widely share the lessons learned. For this to happen, health professionals must have rapid access to information about what works in their own care and in care around the country.

Module 1: Safety Activity

1. If you are working in a surgical unit, look at SCIP inf 9 (Specifications Manual for National Hospital Inpatient Quality Measures v4.2b) which discusses monitoring of post op urinary catheter removal. This measure is no longer required by the Joint Commission (and therefore the link above is to an older version of the manual), but UNC continues to monitor and report it because it has shown benefit for prevention of post-op UTI. Find out who on your unit monitors this, how the data is collected and used, and what the data have been for your unit over the last year.

OR

2. If you are in a surgical rotation or planning to pursue a surgical field, read these two references about surgical “never events”:
   a. Challenges in Reducing Surgical “Never Events”
   b. Wrong Site Surgery, Retained Surgical Items, and Surgical Fires: A Systematic Review of Surgical Never Events
Write about strategies in the OR that you have witnessed that attempt to prevent surgical “never events”. Have you been part of a “never event”? Write about your experience. Propose strategies or changes that could improve the safety of the OR. How would you implement and test these changes?

OR

3. Read references 2 and 3. Pay attention to how errors, particularly **system errors**, are potentially occurring on your service. You may have already experienced an error or near error which you can write about. Discuss and suggest system improvements to prevent these errors with specific reference to this reading, the barriers to safe care, and systems to promote safe care.

OR

4. If you are doing your rotation in the ED you can join in either the monthly NSTEMI meeting, Stroke Team meeting, or the bimonthly multidisciplinary clinical operations group (COG) meeting. These groups track the quality of care in the ED. Contact Ashly Turner (Ashly.Turner@unchealth.unc.edu) for COG, Kaitlin Strauss (Kaitlin.Strauss@unchealth.unc.edu) for STEMI, or Nicole Burnett (Nicole.Burnett@unchealth.unc.edu) for Stroke to find out the next scheduled meeting. Write about the meeting including the problems/gaps in care identified, ongoing PDSA cycles, and possible system changes proposed.

OR

5. Go onto the website [http://www.leapfroggroup.org/about_leapfrog](http://www.leapfroggroup.org/about_leapfrog) Read about Leapfrog and then look at the hospital safety data (Hospital Safety Score) and write about UNC hospitals safety data compared with another hospital, and areas where UNC could improve. Discuss potential system improvements.

OR

by the study’s author. Write about your experience with handoffs in the hospital and how you could envision applying lessons learned in this study to inpatient services at UNC. How would you test your changes for success?

Module 1: Project

Find out about the quality improvement activities occurring in your clinic and describe them using the framework of the Plan/Do/Study/Act cycle (PDSA cycle). See refs 1, 4 and 5 below.

Readings

1. Basics of Quality Improvement in Healthcare
   http://www.mayoclinicproceedings.org/article/S0025-6196(11)61194-4/fulltext
2. Improving patient safety by taking systems seriously.
   http://jama.ama-assn.org/content/299/4/445.full
3. A Decade after To Err is Human: What should health care leaders be doing?
   http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4439398/
4. PDSA ref
   https://www.med.unc.edu/apselect/files/pdsa/at_download/file
5. Science of Improvement: Testing Changes
   http://www.ihi.org/knowledge/Pages/HowtoImprove/ScienceofImprovementTestingChanges.aspx
Module 2

Goal: to understand the physician’s role as an advocate.

What is physician advocacy?

In today’s complicated health care delivery system, physician advocacy is important for patients, the medical profession, the health care system, and society. One emphasis is on helping patients understand their health care options and helping them negotiate an increasingly complex health care system. There is also a growing emphasis on provider health and wellness. Advocating for improvements in the health care system overall also falls under the purview of the physician advocate.

In the bigger picture, patient advocacy is purposeful actions by health professionals to address determinants of health which negatively impact individuals or communities by either informing those who can enact change or by initiating, mobilizing, and organizing activities to make change happen. Herein lies the mandate of the physician advocate: to support behaviors, actions and events that are likely to promote health-related change and to discourage those that impede it. Health advocacy should be a pervasive part of a physician’s practice, targeting individual patients, the physician’s immediate practice population, institutions, social organizations, and various levels of policy-makers.

All of the professional organizations, such as the American Academy of Family Physicians (http://www.aafp.org/advocacy.html) and the American College of Surgeons (http://www.facs.org/ahp/index.html) have advocacy resources on their websites. You can find the organizations’ statements on various issues such as health reform and read their letters to congressmen and the President. You also have the opportunity to send your own advocacy letters - the toolkit on the AAFP gives good guidelines.

Here are some real life examples of physician advocacy:

Patient advocate: A health care advisor for a policy maker
When Dr. S learned of a bill pending in the U.S. Senate that would adversely affect her patients, she called the office of her U.S. senator and spoke to the legislative aide who worked on health issues. The aide noted her concern and then asked her advice on another health-related matter. Dr. S spent several minutes offering a thoughtful opinion and left her number with the aide, offering to help in the future. Dr. Snow meets quarterly with her U.S. senator and his legislative aide, and she has become a trusted advisor on health-related issues. She uses the opportunity to advocate solutions to the needs she sees in her practice and community.
Parent Education: School Board Advisor
Dr. B recognized an extraordinary rate of obesity among his school-aged patients while practicing in rural Washington. After discussing the issue with several families, he concluded that a contributing factor was the poor food choices found within the local schools. He decided to bring the issue before the local school board, requesting action on the children's behalf. School board members agreed with Dr. B and felt empowered by his medical expertise to take action. They encouraged Dr. B to become a member of the board to follow this project to completion. On the basis of his commitment to these children, he agreed. His advocacy successfully effected changes in nutrition policy in the schools.

Hospital physician: Leader in injury prevention
Dr. R was sickened by the number of emergency department visits of children suffering injuries related to falls from high-rise windows. She sought a small grant to place window guards on apartment building windows in the surrounding neighborhood. When she demonstrated the dramatic decrease in injuries, the city council passed a law requiring protective guards on all high-rise windows. This initial effort led to a national change in laws promoting injury prevention from falls.

Patient advocate: Liaison to media and health reporter
Incensed by the injustice he saw in his daily care of patients without health insurance, Dr. M felt that change would come only if the public, too, could see what he saw. One particular patient’s story seemed to perfectly illustrate some of the problems faced by the uninsured. With the patient’s permission, he contacted a reporter who covered the story. Dr. M began gathering illustrative stories and pitching them to media outlets which then covered many of the stories. He also wrote and published frequent opinion pieces, editorials, and letters to the editor on health matters. In the process, he developed relationships with the local media and advocacy communities. He began coordinating his efforts with local health care advocates to link media coverage with their policy-change and organizing efforts. He also became an advisor on health matters to a number of local reporters.

Readings:

Module 2: Advocacy Activity

1. Go to your future professional website and read about the advocacy issues in which they are currently involved. Choose one of these and write a short description including your view on the issue.

Module 3

Goal: to understand different health care plans

Health Care Plans
Many of the larger insurance companies; for example, BlueCross BlueShield, offer all the different types of health insurance which are:

A. Indemnity insurance
   B. Managed Care of which there are 3 types:
       i. Health Maintenance Organizations (HMOs)
       ii. Preferred Provider
       iii. Point of Service

A. Indemnity/“Fee for Service”
This type of coverage offers more flexibility in choosing doctors and hospitals. Usually, the patient can choose any doctor and can change doctors at any time. They do not need a referral to see a specialist. Indemnity insurance pays only part of the medical bills and the patient is responsible for the rest. The out of pocket costs are likely to be higher for certain services than with some managed care plans. There is often a deductible which may range from $100 to $300 per year per covered person or $500 or more per year for a family.

With an indemnity plan there is often more paperwork for the patient to do. Some doctors will submit the claim for the patient and once the doctor receives payment from the insurance company, he or she will bill the patient for the difference. With other doctors, the patient will have to pay the entire bill and file a claim with the insurance company to be reimbursed. Indemnity insurance pays a portion of the bill—usually 80 percent—after the deductible has been met, although this may vary and the patient pays the remaining 20%. Indemnity policies typically have an out-of-pocket maximum. This means that once the expenses reach a certain amount in a given calendar year, the fee for covered benefits typically will be paid in full by the insurance plan. There also may be lifetime limits on benefits paid under the policy. Most experts recommend a policy with a lifetime limit of at least $1 million. Anything less may not be sufficient. Some companies, such as BlueCross BlueShield, have stopped offering indemnity plans.
B. Managed Care

More than half of all Americans who have health insurance are enrolled in a managed care plan. Managed care plans usually cover a wide range of health services. With these plans, costs to the patient are lower when patients use the doctors and other providers who participate in the plan (network providers).

In most cases, the patient will not have to fill out any insurance forms or submit any claims to the insurance company when they use in-network providers. Usually, they pay a copay (typically $10 to $20 for an office visit) each time they go to the doctor or hospital or fill a prescription. The copay may vary depending on whether they see a primary care doctor or a specialist and whether they receive a generic or brand name prescription drug. Most managed care plans have a list of drugs that they cover, called a formulary. The copay for prescription drugs will probably depend on whether they are getting a generic drug, a brand name formulary drug, or a brand name drug not on the plan's formulary. For example, the copay might be $10 for a generic drug, $25 for a formulary drug, and $40 for a brand name non-formulary drug. Some managed care plans have a mail-order pharmacy option so the patient can send their prescription for routine maintenance drugs to the mail order pharmacy. In most cases, they will receive a 3-month supply of medication by return mail. They may still pay a copay, but the cost may be lower than it would be at a local retail pharmacy.

Managed care plans have lower out-of-pocket expenses for patients, as long as they see doctors who are part of the plan (in-network providers).

There are three main types of managed care plans:

- Health maintenance organizations (HMOs).
- Preferred provider organizations (PPOs).
- Point-of-service plans (POS).

All three types of managed care plans have contracts with doctors, hospitals, and other providers. They have agreed on certain fees with these providers. As long as the patient receives their care from a plan provider, they will be responsible only for any cost-sharing or co-payments that the plan requires.

Health Maintenance Organizations
HMOs have long been known for a focus on prevention and wellness. Traditionally, HMOs required that the patient receive most of their care from one primary care physician who is aware of the total health picture. The patient must receive all of their medical care from network providers,
except in emergencies. HMOs usually have flat copayments rather than deductibles and co-insurance, and no lifetime limits on coverage.

When a patient enrolls in an HMO, they need to select a primary care physician who will be responsible for coordinating all of their care. Primary care physicians may be family physicians, internists, pediatricians, obstetricians-gynecologists, or general practitioners. When the patient is ill, the primary care doctor will see them first, unless it is an emergency. If a referral is needed this will be done by the PCP and usually the HMO will not pay for a specialist without this referral. In most cases, the patient must see a specialist who participates in the HMO. Sometimes, in special circumstances, HMO patients may be referred to providers outside the HMO network and still receive coverage: e.g. if you are on vacation and sustain a fractured bone.

If the patient needs to be admitted to the hospital and it is not an emergency, they may have to obtain precertification although often the hospital will take care of this. Non-emergency hospital care may not be covered without this precertification. In case of an emergency admission, the patient, a family member, or the hospital will need to contact the insurance company within a certain timeframe (usually within 48 hours of admission) to obtain written confirmation of coverage for the hospital stay.

Preferred Provider Organizations and Point-of-Service Plans
PPOs and POS plans combine features from both fee-for-service and HMOs. PPOs and POS plans offer more flexibility than HMOs in choosing physicians and other providers. POS plans have primary care physicians who coordinate patient care, but in most cases, PPOs do not. Premiums tend to be somewhat higher in PPOs and POS plans than in traditional HMOs.

Generally, the greater the emphasis on in-network care, the lower the premiums and the more comprehensive the benefits will be. Consumers and employers make tradeoffs, deciding which is more important: a greater choice of providers or a lower premium.

If the patient chooses to go out of network for their care, they may have to meet a deductible before the plan begins to pay benefits. Also, they may have to pay the bill and submit paperwork to the plan for reimbursement of covered expenses.

In a PPO, the patient does not need a referral to see a specialist or get other types of care. When they go out of the plan's network for care, PPOs and POS plans work like fee-for-service plans and charge coinsurance.
Module 3: Health Care Plans Activities

1. Find a patient with multiple prescriptions and look at their insurance prescription plan (usually available online). Write about the different drug tiers and how much they have to pay for their medication. If your patient is Medicare, this is the NC website for part D: http://www.q1medicare.com/PartD-Medicare-PartD-PDP4NorthCarolina.php
   See if you can find your patient’s plan and compare it with another plan. Why have they chosen the plan they have?

OR

2. Find a patient who has limited resources and find out how they pay for their medications. Do some research to see whether you can find a less expensive way for them to pay for their medications. Most drug companies have systems to pay for patients’ medications. Look on their websites. Also go to www.pparx.org/Intro.php. This is a website where you can search on behalf of your patient to find out whether you can get less expensive medications. There are programs such as RX Outreach which provides patients with low cost medications. In addition, go onto the Wal-Mart/Target/Sam’s $4 a month prescription website and look at the formulary. Write about a patient who you helped find a more cost effective way of paying for their medications.

Module 3: Health Care Plans Project

1. Go to http://www.ehealthinsurance.com/north-carolina-health-insurance and compare two different insurance plans, specifying the different types of plans (HMO, POS, etc) and why the costs might vary. Look at the plan details. Specifically, address if maternity services are covered and explore the details of prescription coverage. Summarize two different health insurance options and the pros and cons of each.

OR

2. Write about the levels of care in the health care exchanges. Discuss the options available in North Carolina, the different plans, the role of the brokers and how people sign up for a plan. Summarize the pros and cons of the exchanges. Use https://www.healthinsurance.org/north_carolina-state-health-insurance-exchange/, the Kaiser Family Foundation website (http://kff.org/health-reform/state-profile/state-exchange-profiles-north-carolina/) and https://www.healthcare.gov/get-answers/ to inform your project.

Readings
The agency for healthcare quality and research has a good website outlining the different types of insurance.

Healthcare.gov also has helpful, basic information
http://www.hhs.gov/healthcare/
Module 4

Goal: to understand the effect of health care costs on health and to explore possible methods of cost constraint.

Health care costs in the US are spiraling up every year. A government report stated that in 2011 total national health expenditure was $2.7 TRILLION representing 17.9% of the gross domestic product (GDP). U.S. health care spending is expected to increase at similar levels for the next decade reaching $4 TRILLION in 2015, or 20 percent of the GDP. The report concluded that the status quo is just not a viable option.

In 2011 the annual premium for an employer health plan covering a family of four averaged nearly $15,000, an increase of 97% since 2002, and will increase to $24,000 a year by 2019 unless the rate of spending declines.

Experts agree that the U.S. health care system is riddled with inefficiencies, excessive administrative expenses, inflated prices, poor management, inappropriate care, waste and fraud. These problems significantly increase the cost of medical care and health insurance for employers and workers and affect the security of families. The PPAC Act (Obama Care) has introduced the concept of Accountable Care Organizations to decrease cost and increase quality.

Accountable Care Organizations
An ACO is a network of doctors and hospitals that shares responsibility for providing care to patients. In almost every region of the country, hospitals and physicians are forming (or talking about forming) ACOs and entering into other arrangements designed to integrate care, manage chronic conditions, and enable evidence-based practices. These networks of doctors and hospitals would coordinate patient care and earn bonuses if they save Medicare money and meet quality targets. The Obama administration hopes ACOs will spring up around the country, initially treating Medicare patients but eventually other people as well. The goal is to impose efficiency on a health system that now fosters disjointed and excessive medical care, driving up costs.

The health law called for ACOs to be launched in January 2012, with each capable of treating at least 5,000 Medicare patients. As envisioned, these networks of doctors and hospitals might work for the same organization or separately, sharing information about patients and financial responsibility for their care.

Module 4: Health Care Cost Activities.

1. Read the papers (refs 1, 2, and 3) on accountable care organizations and write about your perceived pros and cons.
2. What are the different levels of co-pay in the clinic you are working? What does the receptionist do if the patient says they do not have money for the co-pay? What percentage of co-pays are collected at the time of the visit and what percentage are ultimately collected? If you are not working in a clinic you do not need to do this activity.

OR

3. Spend 2 hours with a financial counselor who advises patients on payment issues. Write about the function of a financial counselor and resources available to them to help patients with payment. If you do not have one where you are, please e-mail sarah_smithson@med.unc.edu and we can set it up for you any day.

OR

4. Look at the choosing wisely website http://www.abimfoundation.org/Initiatives/Choosing-Wisely.aspx Choose one set of choosing wisely suggestions and comment on the evidence for their recommendations and whether you think any of them will change practice.

Module 4: Health Care Costs Project

1. “The Possible Negative Impact of Health Care Reform.” Health Care Reform has been passed under the Patient Protection and Affordable Care Act. We have looked at some of the implications during our lectures. However, like most good things in life, there are some serious concerns about the effect of reform. Research and discuss 4-5 of these concerns. Use at least 3 references.

OR

2. Read the following reference and write about 5 ways to decrease health care costs. Use additional references. http://www.nejm.org/doi/full/10.1056/NEJMs1205901

1. Accountable Care Organizations. http://jama.ama-assn.org/content/304/15/1715.long

3. The Era of Delivery System Reform Begins.  
Goal: To understand the importance of good transitions of care.

A substantial proportion of hospital admissions are re-admissions. Readmission rates within 30 days are as high as 25% for Medicare beneficiaries. Sometimes these are avoidable and have occurred due to poor discharge planning, for example altered medications. Studies have found that quality and patient safety are compromised during this vulnerable period because of high rates of medication errors, incomplete or inaccurate information transfer and lack of follow up. Patients along with their care givers are the common thread across different care venues and studies in which patients and caregivers are encouraged to take a more active role in their care have shown lower rates of re-hospitalization.

Ref 5 describes a recent project at UNC that has significantly decreased readmission rates.

Obama’s new health care bill includes a clause which will penalize hospitals with higher than average readmission rates, so this will focus our attention on measures we need to take to decrease these rates. Last year UNC Hospitals lost money due to their high readmission rate.

Many patients without a personal medical home, so with no one coordinating and overseeing their care, end up in the ER inappropriately, which is often an expensive place to get medical care, to say nothing of the wait non urgent patients may have.

Module 5: Transitions Activities

1. For a patient who has recently been discharged from hospital describe their transition of care. Read ref 2 and relate it to the transitions of care for your patient.
   OR

2. Go into the Dartmouth Atlas program and look up the data for post acute care and compare the percentage of patients with an appointment within 14 days of discharge for UNC and 2 other hospitals.
   Also choose another measure and write about reasons for variation in care (eg compare spinal fusion rates for spinal stenosis in Florida with North Carolina)

Module 5: Transitions Project

Write about Medicare’s new readmission penalties.
https://data.medicare.gov/Hospital-Compare/Hospital-Readmission-Reduction/9n3s-kdb3

Look at the above link and compare UNC’s readmit rate for the 3 conditions with another hospital

Then read reference 2 and sit down with one of your patients who has just been discharged from the hospital and ask them to describe their hospital experience, what their understanding is of their diagnosis and the treatments received, the follow up plan, how they will cope at home, what resources they will use, etc. Discuss what factors were and were not covered in table 1 in ref 2. Assess their risk of readmission with the 8 P risk assessment tool in ref 4. Finally write about the factors that prevent hospital readmission using at least one other reference.

Reading
   https://www.clinicalkey.com/#!/ContentPlayerCtrl/doPlayContent/1-s2.0-S002571250700171X/

   http://www3.interscience.wiley.com/cgi-bin/fulltext/116330624/HTMLSTART

3. Transitions of Care PDF

4. 8 P readmission assessment tool.
   http://www.hospitalmedicine.org/ResourceRoomRedesign/RR_CareTransitions/html_CC/06Boost/03_Assessment.cfm

5. Decreasing readmissions at UNC
   http://link.springer.com/article/10.1007/s11606-014-2819-8
Module 6

Goal: to learn about health care systems in other countries.

Health Care Systems across the World

The type of health care you receive and your life expectancy depends on where you happen to be born. If you live in Japan your life expectancy is 82 yrs, in the US 78 yrs and in Mozambique 42 yrs. There are many different types of health care systems, most include a mix of government provided health care and private health care in varying proportions. How much health care individuals receive depends on the available resources, government provided health care and the patients ability to pay. The WHO published their world health report in 2008 and stated their top goal to be Universal coverage reforms that ensure that health systems contribute to health equity, social justice and the end of exclusion, primarily by moving towards universal access and social health protection. The report summarizes 5 short comings of health care systems around the world.

1. Inverse care: people with the most means and often the lowest needs consume most health care.
2. Impoverishing care: in systems where payment is out of pocket, payment for catastrophic events causes over 100 million people annually to fall into poverty because they have to pay for their health care.
3. Fragmented care: excess specialization and narrow focus of some disease control programs. Health services for poor and marginalized groups are often highly fragmented and severely under-resourced, while development aid often adds to the fragmentation.
4. Unsafe care. Poor system design that is unable to ensure safety.
5. Misdirected care: resource allocation clusters around curative services at great costs neglecting the ability of primary prevention and health promotion to prevent up to 70% of the disease burden.

The article below gives you an idea of 7 different health care systems and how it effects adults’ perception and experience of health care.

Module 6: Health care systems activities

Read reference 1 below and compare the view of healthcare in the US with two other countries. Write briefly about how the ACA has changed access to health care for many Americans.
Module 6: Health Care Systems Project

Read ref 1. Research health care coverage in a different country and compare it with that in the US. Write about how the two systems are financed. Discuss the pros and cons of the systems you researched. Compare the health indicators of your chosen country with those in the US:
There is a lot of data here so just choose parameters you think are particularly interesting.

Readings
1. Different Health Care Systems
   http://www.itup.org/Reports/Fresh%20Thinking/Health_Care_Systems_Around_World.pdf
2. Health care reforms in America: perspectives, comparisons and realities. Glassock RJ. QJM early access
   http://qjmed.oxfordjournals.org/cgi/content/full/hcq072v1?maxtoshow=&hits=10&RESULTFORMAT=&searchid=1&FIRSTINDEX=0&resourcetype=HWCIT
Module 7

Goal: to learn about Value Based Purchasing. (Formerly pay for performance or P4P).

Value Based Purchasing (VBP) is an emerging movement in health insurance (initially in Britain and United States). Providers under this arrangement are rewarded for meeting pre-established targets for delivery of healthcare services. This is a fundamental change from fee for service payment. The VBP payment model rewards physicians, hospitals, medical groups, and other healthcare providers for meeting certain performance measures for quality and efficiency. Disincentives, such as eliminating payments for negative consequences of care (medical errors) or increased costs, have also been proposed. In the developed nations, the rapidly aging population and rising health care costs have recently brought VBP to the forefront of health policy discussions. Pilot studies underway in several large healthcare systems have shown modest improvements in specific outcomes and increased efficiency, but no cost savings due to added administrative requirements. Statements by professional medical societies generally support incentive programs to increase the quality of health care, but express concern with the validity of quality indicators, patient and physician autonomy and privacy, and increased administrative burdens.

The centers for Medicare and Medicaid services (CMS) are developing and implementing a set of pay-for-performance initiatives to support quality improvement in the care of Medicare beneficiaries. In addition to the initiatives for hospitals, physicians, and physician groups CMS is also exploring opportunities in nursing home care – building on the progress of the Nursing Home Quality Initiative – and is considering approaches for home health and dialysis providers as well. Finally, recognizing that many of the best opportunities for quality improvement are patient-focused and cut across settings of care, CMS is pursuing pay-for-performance initiatives to support better care coordination for patients with chronic illnesses for example childhood asthma.

Go to the following link and read about VBP. It is rather a long document but you can scan through it and read the quality indicators and the benchmarks.

Tracking of Hospital acquired conditions

Medicare now track a hospital’s error rate known as hospital acquired conditions and in 2014 will cut payment by 1 percent to hospitals with the highest rates of patient safety issues. As Medicare patients comprise over 50% of hospital admissions this will be some guide as to the quality of care in each hospital.
Readmission rates
As from 2013 readmission rates of Medicare patients with pneumonia, heart failure, knee/hip arthroplasty, COPD or AMI will be collected. The definition of readmission is a readmission within 30 days of discharge. The formula that is used to calculate readmissions includes a measure of morbidity. Hospitals with more readmissions than Medicare expected given their mix of patients are penalized by losing up to 1% of their regular payments. The maximum penalty ramped up to 2% in October 2013 and 3% in 2014.

Read here on the CMS website about these penalties
http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/Readmissions-Reduction-Program.html

and in KFF

The National Committee for Quality Assurance: P4P Initiatives
The National Committee for Quality Assurance (NCQA) is a private not-for-profit organization dedicated to improving health care quality. Since its founding in 1990, NCQA has been a central figure in driving improvement throughout the health care system, helping to elevate the issue of health care quality to the top of the national agenda. The NCQA seal is a widely recognized symbol of quality. Organizations incorporating the seal into advertising and marketing materials must first pass a rigorous, comprehensive review and must annually report on their performance. For consumers and employers, the seal is a reliable indicator that an organization is well-managed and delivers high quality care and service. NCQA’s contribution to the health care system is regularly measured in the form of statistics that track the quality of care delivered by the nation’s health plans. Every year for the past five years, these numbers have improved; health care protocols have been refined, doctors have learned new ways to practice, and patients have become more engaged in their care. Those improvements in quality care translate into lives saved, illnesses avoided and costs reduced. For instance, for every additional person who receives beta blockers after a heart attack, chances of suffering a second, perhaps fatal, heart attack are reduced by up to 40%.

There are many different approaches to assessing health care quality: on- and off-site surveys, audits, satisfaction surveys, and clinical performance measurement to name a few. NCQA uses all these approaches in a range of accreditation, certification, recognition and performance measurement programs for different types of organizations, medical groups and even individual physicians. It is through these programs that NCQA is able to gather quality information to consumers, employers, health plans and doctors. The range of evaluative programs offered by NCQA is broad and offers 5 disease management programs: asthma, COPD, diabetes, heart failure and ischemic vascular disease.
Physician Quality Reporting System
The Physician Quality Reporting Initiative (PQRI) was first implemented as a voluntary program in 2007. The program is now considered to be permanent and therefore the program name has been amended to the Physician Quality Reporting System (PQRS). The program provides incentive payments to eligible physicians and other practitioners who satisfactorily report data on quality measures for covered services furnished during a reporting period, which is typically one year. Multiple different conditions including diabetes, hepatitis C, IBD, Prevention measures, CAD, Heart failure, HTN, Rheumatoid arthritis, back pain, oncology measures, dementia, cataracts, asthma, Parkinson’s are included to cover a range of specialties.

CMS is providing a one percent incentive payment in 2011 and 0.5 percent incentive payments in 2012 – 2014 for successfully reporting PQRS measures. Penalties will begin in 2015 for those who do not satisfactorily submit quality data.

Physicians who have earned Recognition from the NCQA through Physician Recognition Programs (DPRP) can opt to have NCQA submit their clinical quality data to Medicare for use in the Physician Quality Reporting System (PQRS) and receive the financial rewards for collecting and reporting the data about the quality of their diabetic care.

Module 7: VBP Activity

1. Go onto the website http://www.medicare.gov/hospitalcompare/ and compare the recorded outcomes of 3 local hospitals for a condition of your choice. For a substantial number of conditions data is missing so find a condition where there is enough data available. Write about the different outcomes. In addition compare some outcomes for patient safety measures and patient experience measures and comment on your findings.

2. Go onto the PQRS website and view the measures which apply to primary and secondary care. The following conditions are included Diabetes, Chronic Kidney Disease (CKD), Preventive Care, Coronary Artery Bypass Graft (CABG), Rheumatoid Arthritis (RA), Perioperative Care, Back Pain, Hepatitis C, Heart Failure (HF), Coronary Artery Disease (CAD), Ischemic Vascular Disease (IVD), HIV/AIDS, Asthma, Chronic Obstructive Pulmonary Disease (COPD), Inflammatory Bowel Disease (IBD), Sleep Apnea, Dementia, Parkinson’s Disease, Hypertension, Cardiovascular Prevention, Cataracts, Oncology, Total Knee Replacement (TKR), General Surgery, and Optimizing Patient Exposure to Ionizing Radiation (OPEIR). Go to http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/index.html

Then click on accept and open. Open the measures groups specifications manual where you can see the PQRS measures. Choose 1 or 2 that your practice are reporting and discuss how they are implementing and recording these measures.

Module 7: VBP Project

1. If you are in a specialty practice you can ask them if they have considered applying for the patient centered specialty practice recognition program. Look at the link below for the criteria to achieve this recognition. Some specialty practices in NC have applied and achieved this standard e.g. Pulmonary Clinic of the Carolinas. Write about each standard and whether your specialty practice meets them. If they do not what system changes could they institute to meet these standards?

http://www.ncqa.org/Programs/Recognition/Practices/PatientCenteredSpecialtyPracticePCSP/PatientCenteredSpecialtyPracticeFAQs.aspx

2. Read this reference on meaningful use:


Analyze your clinical setting and comment on the MU criteria that are met and unmet. The physician you are working with should be able to tell you how to access the meaningful use measures for his department. What processes has that department instituted to help meet the criteria?

Here are the criteria:


Readings

1. Value based purchasing.


http://www.aafp.org/fpm/2006/0700/p69.html


http://annals.org/data/Journals/AIM/20202/0000605-201003160-00006.pdf?resultClick=1
Module 8

Patient Centered Medical Home

The concept of the patient centered medical home (PCMH) which was first developed by the Academy of Pediatrics has now been endorsed by the American College of Physicians and the American Academy of Family Physicians. The PCMH is a health care setting that facilitates partnerships between individual patients, and their personal physicians, and when appropriate, the patient’s family. Care is facilitated by registries, information technology, health information exchange and other means to assure that patients may choose to receive the care when and where they need and want in a culturally and linguistically appropriate manner. Practices are going to have to demonstrate they meet criteria that relate to open access for appointments, out of hours appointments, EMRs etc in order to refer to themselves as a PCMH. The processes involved in a PCMH come under the umbrella of systems based practice. Many practices are now trying to receive recognition from NCQA as a PCMH because they receive financial incentives based on the level of recognition received. These incentives can amount to many thousands of dollars and are paid by a combination of Medicaid, Medicare and private insurance. Some specialists who provide primary care to their complex patients may also benefit financially by gaining recognition as a PCMH. For example pulmonologists who care for CF patients. (Reference 3)

Readings

Module 8: PCMH Activity

Write about the concepts of a PCMH.

Module 8: PCMH Project

Write a description of the features in your practice that meet the 10 must pass standards for a medical home (see above reference no 2 for the standards) and areas where changes need to be made to meet the standards for a medical home. If your practice is not primary care you can still do this but omit must pass element 7 and use one condition for 3.
Module 9

Chronic Care

Almost 50% of the American population live with a chronic disease and 50% of these people have multiple chronic diseases. Our health care system is full of deficiencies that hinder the care of these patients. Those deficiencies include:

1. Rushed practitioners not following established practice guidelines
2. Lack of care coordination
3. Lack of active follow-up to ensure the best outcomes
4. Patients inadequately trained to manage their illnesses

Overcoming these deficiencies will require nothing less than a transformation of health care, from a system that is essentially reactive - responding mainly when a person is sick to one that is proactive and focused on keeping a person healthy.

The Chronic Care Model summarizes the basic elements for improving care in health systems at the community, organization, practice and patient levels. It contains 6 elements: health system, delivery system design, decision support, clinical information systems, self management and community. Listed below are these elements with some of the associated goals.

1. Health system:
   Create a culture, organization and mechanisms that promote safe, high quality care.
   • Visibly support improvement at all levels of the organization, beginning with the senior leader.
   • Encourage open and systematic handling of errors and quality problems to improve care.
   • Provide incentives based on quality of care.
   • Facilitate care coordination within and across organizations.

2. Delivery system design:
   Assure the delivery of effective, efficient clinical care and self-management support.
   • Define roles and distribute tasks among team members.
   • Use planned interactions to support evidence-based care.
   • Provide clinical case management services for complex patients.
   • Ensure regular follow-up by the care team.
   • Give care that patients understand and that fits with their cultural background.
3. **Decision support:**
Promote clinical care that is consistent with scientific evidence and patient preferences.
- Embed evidence-based guidelines into daily clinical practice.
- Share evidence-based guidelines and information with patients to encourage their participation.
- Integrate specialist expertise and primary care.

4. **Clinical Information** systems:
Organize patient and population data to facilitate efficient and effective care.
- Provide timely reminders for providers and patients.
- Facilitate individual patient care planning.
- Share information with patients and providers to coordinate care.
- Monitor performance of practice team and care system.

5. **Self-management support:**
Empower and prepare patients to manage their health and health care.
- Emphasize the patient's central role in managing their health.
- Use effective self-management support strategies that include assessment, goal-setting, action planning, problem-solving and follow-up.

6. **Community:**
Mobilize community resources to meet needs of patients.

Just reading a list of goals can make it hard to visualize these in practice so look at the video of this kind of care in action:
Click at the bottom of the page in the text where it says “right here."

**Module 9: Chronic Care Activity**

Choose 3 elements of the chronic care model and write about a patients care with respect to these 3 elements.

**Module 9: Chronic Care Project**

Write about a patient with a chronic disease and how his/her care fits into the 6 elements of the chronic care model.