Stanford MEDICINE

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INTRO TO HEALTHCARE STUDY GUIDE

MODULE 3 - HOSPITALS, OTHER PROVIDER ORGANIZATIONS, AND RELATED PAYMENT SYSTEMS

LEARNING OBJECTIVES

1. Describe the main features of hospitals, types of care provided at hospitals, and the ways that hospitals and physicians are related
2. Describe the main features of different approaches to hospital payment, including DRG, per-diem, global budgets, and fee-for-service/charge-based systems
3. Identify other types of providers in addition to hospitals and physicians
4. Describe the main features of health care systems integrating multiple types of providers
5. Describe the main features of pay-for-performance structures
6. Describe the main features of electronic health and medical records

HOSPITAL OVERVIEW

Hospitals are organizations that provide facilities and staff to offer medical care. Can operate as private businesses, on a for-profit or a not-for-profit basis, and some hospitals are owned or operated by government organizations.

A defining characteristic of a hospital is the **provision of beds and infrastructure for inpatient care,** in addition, may have outpatient facilities.

Different Characteristics of Hospitals:

1. Level of services provides
    - Basic to more advanced all the way to tertiary and quaternary care
2. Focus of the hospital
    - Most hospitals are set up to treat a broad range of types of patients and cases called "general hospital"
    - Some hospitals that specialize in a particular area
3. Provision of teaching

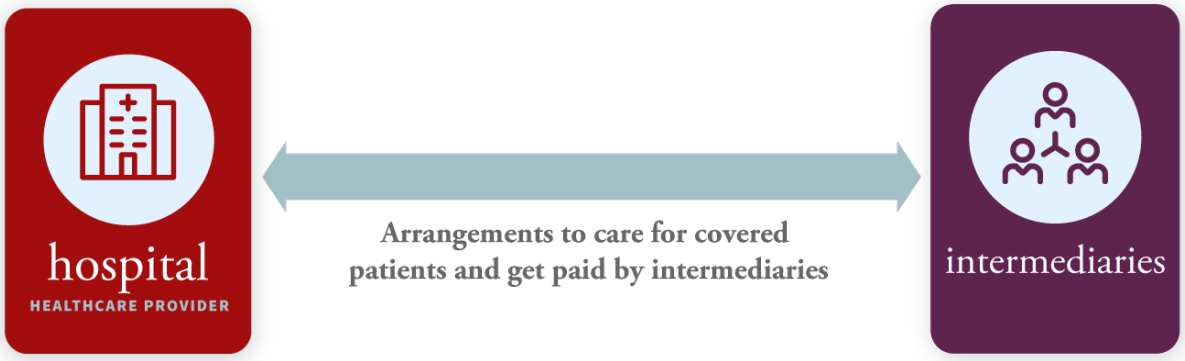
- Some hospitals operate programs to help train new doctors, and we refer to them as teaching hospitals, and sometimes we identify hospitals with a strong association with a medical school as academic hospitals

Relationship between hospital and physician:

1. Hospitals employs physician directly
2. Physician has a separate practice with an arrangement to practice at the hospital

Admitting Privileges: arrangements for physicians to provide services at a hospital

Physician practice and hospital would still be separate entities, separate businesses that are organized and probably paid separately.



Relationship between hospital and intermediaries:

- Arrangements with the intermediaries to take care of covered patients, and arrangements for getting paid when they do
- This can go a few different ways depending on the country and the health care system
- **Hospital Network:** A group of hospitals with whom an insurer works, and which enrollees are required or encouraged to use
- A hospital that contracts with an insurance company is considered 'in-network'

HOSPITAL PAYMENT

FEE FOR SERVICE AND PER DIEM

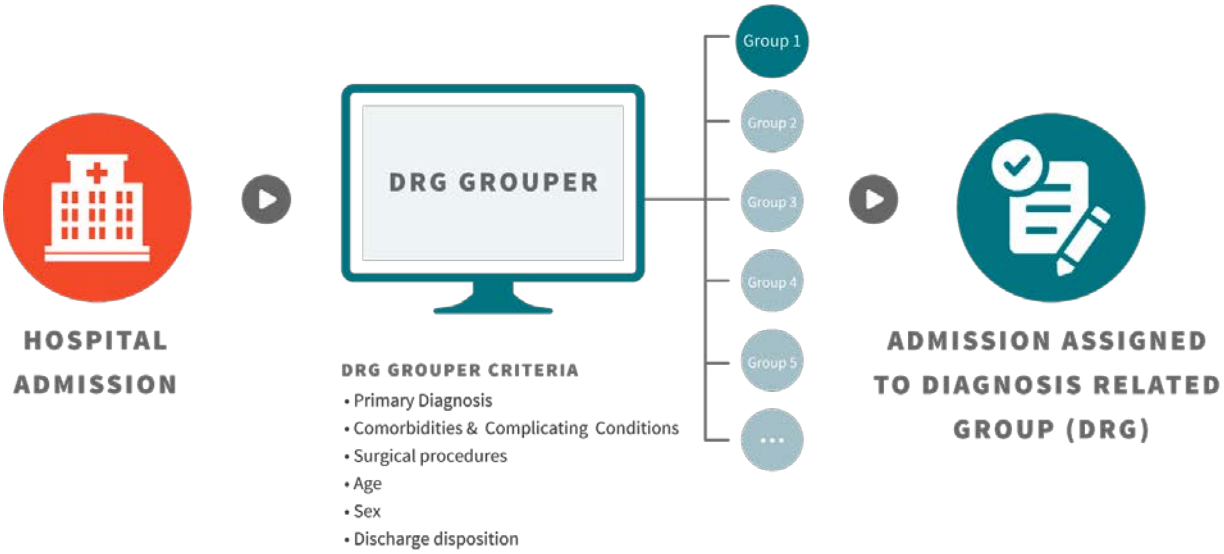
1. Fee-for-service: A fee is paid for each service provided to a patient
    - Hospitals maintain what we often call a "chargemaster," a list of all of the services the hospital can provide, and the amount the hospital charges for each
    - Cost-based reimbursement - hospitals present intermediaries with their costs for taking care of a patient and payment is based on the cost
2. Per diem: Payment per patient day
    - Hospitals and intermediaries set a fixed amount the hospital will be paid for a patient day in the hospital, regardless of the hospital's charges or the cost incurred for caring for that particular patient that day
    - Per-diem payments can vary:
        i. By type or complexity of services
        ii. By the day of the hospital stay
        iii. If there are *carved out* services

Terminology

- Carve out: When specific services are paid separately from the per-diem

DRG SYSTEM

DRG (Diagnosis-Related Groups): A common system or method for paying hospitals, generally for inpatient care they provide. In a DRG system, hospitals are paid a flat payment for each specific discharge diagnosis, meaning **payment per hospital stay**.



DRG systems have a method for assigning patients to groups based on their diagnoses. This grouping is done by an algorithm, generally some software, that is sometimes referred to as a grouper.

Each DRG is associated with a specific allowed payment amount. One common way to associate each DRG with an allowable payment amount is to assign it a weight, reflecting something about the complexity or expected cost to the hospital of caring for a patient in the group. They use conversion factors to calculate the weights

Terminology

- **DRG weight:** A value assigned to a DRG reflecting complex
- **DRG Incentives:** Hospitals paid based on patient characteristics, not length of stay or services performed.

Evolution of DRG Systems:

- Adding more groups
- Incorporate consideration of treatments

The weights or payment amounts for each DRG generally are designed to be related to the average amount of care a patient in a group would need. For the patients who need extra care, DRG systems often provide for special extra payments when cases meet certain standards. We often called these outlier payments.

DRG systems comes under the terminology called prospective payment.

Terminology

- **Outlie payments:** Payments in addition to the DRG for patients using much more care than expected for their group
- **Prospective payment:** Payment is based on the patient condition at the outset of treatment, not on the actual treatments given.

GLOBAL GUDGETS

Global Budget is a way of paying for inpatient care, and they can easily extend to cover outpatient care provided by the hospital too.

Global budget model: A payment system where hospital is paid a fixed amount for a period of time

1. Often one year
2. To take care of a known or predicted population
3. To provide a defined scope of services

One general aspect of global budgets is that they often work best when they can capture a large share, maybe even all, of the business of a hospital.

Global budgets are harder to use when there are many intermediaries, each making their own deals with hospitals, though that is not to say that this hasn't been tried in a variety of situations.

HOSPITAL TOPICS

Topic 1: Payment arrangements for inpatient and outpatient care can vary

Hospitals provide a lot of inpatient care, but often do provide care to outpatients as well. Payment arrangements for these are often separate. Hospitals may use a fee-for-service, per-diem, DRG approach for their inpatient care but outpatient is likely fee-for-service.

For outpatient care, they may make separate agreements with insurance companies. Lab services, x-rays, ER visits, outpatient clinics are some examples. It could be fee-for-service, sometimes using a chargemaster approach DRG system, but for outpatient services. At any given hospital, payments for inpatient and outpatient services could be similar or could be completely different.

Topic 2: Payment arrangements for hospital-provided services and physician services can vary

Medical services:

1. Professional component: payment for the physician or provider who provides the service
2. Facility component: payment to the facility for providing facilities, personnel, or infrastructure for the service

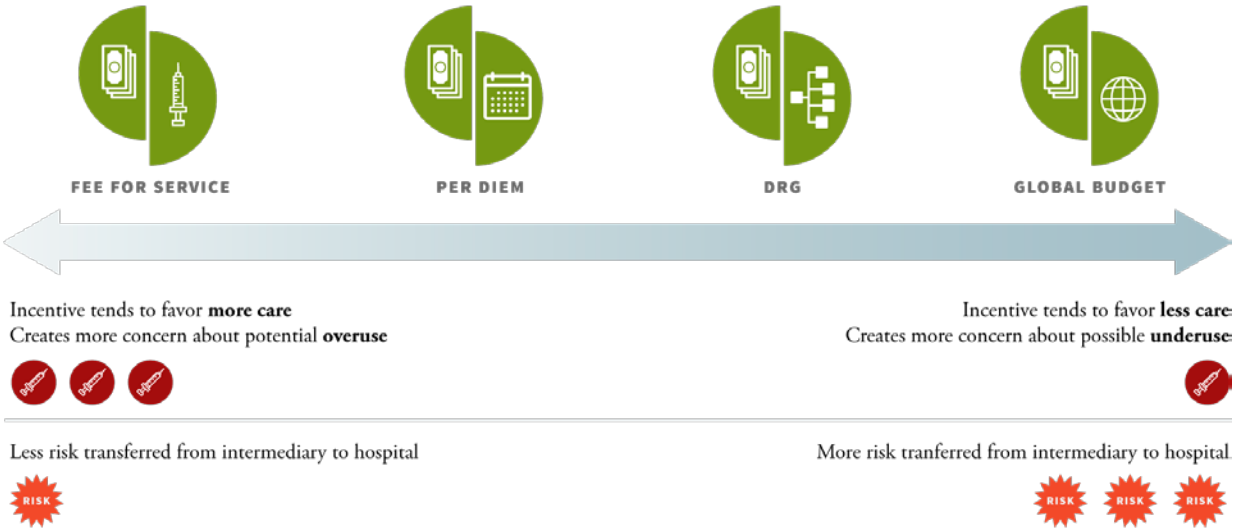
If a physician in private practice. When physicians provide care within the facilities of their practice, they're usually paid for both components at the same time.

In hospitals, inpatient and outpatient, the professional fee and the facility fee billed separately and paid separately. The DRG here covers the facility part. For surgery, there would be a surgeon bill, an anesthesiologist bill, and a facility bill

Topic 3: Amounts charged are often not the same as the amounts paid

Hospitals often send detailed bills to intermediaries, even when they might be paid using per diems or DRGs. Even in fee-for-service billing, there could be notable discounts from the charged amount.

RISK AND INCENTIVES



Risk. Hospital payment systems can move risk around. Fee-for-service systems transfer the least, or maybe no risk. The intermediary keeps the risk associated with patients needing more or less medical care.

Per-diem systems transfer some risk**:** Hospitals would not be at risk when more people get sick and need hospital care, or when patients need to stay longer because they get paid for every day that the

patient is in the hospital. But, the fixed payment per day (per diem) would leave the hospital on the hook for how much care gets delivered in the day.

DRG systems transfer more risk: Hospitals get a fixed payment per discharge, so now when a patient needs more days in the hospital, or when they need more services per day, the hospital has to bear the costs of that. Outlier payment components might help with this.

Global budgets would transfer the most risk**:** Here the hospitals got a fixed budget and accepts the risk associated with whether people get sick or not and the variations in the amount of care needed.

Incentives. Hospital payment systems create some incentives.

Fee-for-service would tend to create incentives to perform more services, which generate more revenue for the hospital.

Per diem systems similarly would tend to create incentives for hospitals to keep patients in the hospital longer.

DRG systems, create incentives to keep patients in the hospital a shorter amount of time. Once you paid the fixed amount per admission, the hospital benefits if they can get that patient out as soon as possible.

Global budgets would provide the strongest incentives to minimize the time spent and the amount that gets done for patients.

Toward the fee for service and per-diem end of the spectrum, we worry less about underuse of care, which might be good, but we might worry about creating overuse – patient staying the hospital longer than they need to for example. On the other end the opposite – we steer toward reduced overuse, but risk underuse – patients getting kicked out before they should be.

One important issue related to incentives for hospitals stems from the fact that hospitals and physicians are often in separate organizations, by physicians are in control of a lot of things that happen at hospitals. One reason that people sometimes like more integrated organizations, with physicians working more directly for the hospital say, is that it can get these incentives aligned. Despite the misalignment of incentives, though, there is evidence from studies that suggests that these incentives do function in these ways. When you use DRG systems, you do tend to get shorter stays, as opposed to fee-for-service or per-diems where you tend to get longer stays.

That leads to some interesting questions about system design.

NON-HOSPITAL FACILITIES

There are many kinds of professionals out there

- Nurses
- Technicians
- Physician assistants or nurse practitioners (NPs)
- Physical therapists
- Dentists, optometrists, chiropractors, nutritionists, podiatrists, and others

A common model would be a salary model, like salaried physicians in a group practice

Dentists, optometrists are set up like doctor's offices as fee for service.

There are also other kinds of organizations, besides physician practices and hospitals. There are independent labs, for example, and independent diagnostic facilities, ambulatory surgery, physical therapy facilities, long term care facilities, and many others.

From a system standpoint and a payment standpoint, these will often have similarities to hospitals in terms of arrangements and payments.

LARGER PROVIDER ORGANIZATIONS

One growing area is hospital systems. Some hospitals operate more or less by themselves, but others have formed into larger organizations with many hospitals that are part of the same company.

In the US, quite a number of hospital systems have formed, some of which have just a couple hospitals, but in some of the large systems there may be dozens of hospitals, or more, that work together.

Another trend in the U.S. has been the integration of hospitals and physicians into the same organizations. We then sometimes call them PHOs – physician-hospital organizations. For example, the hospitals hiring physicians as employees, or buying physician practices, and bringing them all into the same organization.

As PHOs get larger, with broader representation of physicians, we start to apply a term like an ***integrated delivery network***, an ***IDN***, or ***integrated delivery system IDS***.

- Integrated delivery network: an entity that owns, or closely integrates, many providers of different types to provide a broad range of care
- In principle, a true IDN is a self-contained and integrated healthcare ecosystem, with the ability to contain much or even all of the patient experience within it, delivering well-coordinated care.

The **Accountable Care Organizations (ACO).** These are kind of like PHOs or IDNs, but a little different.

PHOs and IDNs and others are what we would call **financially integrated organizations**.

- **Financially integrated organization:** providers work as part of the same business, with a unified bottom line
- **Clinical integration**: providers work together to deliver integrated and coordinated patient care

An ACO is an organization that works to create clinical integration across many providers, but without bringing everyone into the same financially integrated organization. The concept was originally designed for operation within the US Medicare program. The idea of an ACO is to create a structure that can have the breadth of services to meet the normal needs of a broad population. They can do that with each provider or organization voluntarily associating with the ACO, and coming together through some contractual arrangements, but staying in their own separate organizations. The ACO then can make participation and payment arrangements with intermediaries, in which the ACO collectively acts on behalf of the participating providers.

These larger organizations – PHOs, IDNs, ACOs, others like them – often form with the idea of trying to get better more coordinated care to happen. Larger organizations can often take broader capitation or related payment arrangements that can incentivize efficient care.

PAY FOR PERFORMANCE IN PROVIDER PAYMENT

Pay-for-performance (P4P) generally refers to the use of financial incentives or penalties based on whether or not a provider meets some set of performance expectations based on a set of predetermined measures.

P4P focused on whether providers meet performance standards focused on the quality of care. P4P models measure performance using clinical process measures – whether providers are following guidelines for example – or clinical outcome measures – whether actual outcomes of care meet standards. They may incorporate measures from surveys of patients' experiences.

P4P is often implemented as a performance-based bonus on top of whatever usual compensation methods might be in place.

Issues in Pay-for-performance system design:

- What set of measures to use?
- What is the goal or expectation to be met?
- Whether and how to adjust for variations in patient characteristics?
- How much money to put at stake?

PROVIDERS AND ELECTRONIC RECORDS

The original mode of record keeping about patient care was on paper, in what was commonly referred to as a **patient chart**.

Over time it became clear that digitizing this information could be valuable. The idea is that electronic records might be more easily maintained, be more easily searchable, maybe more easily used for communication from one provider to another, and so on.

Electric medical record (EMR): An electric version of a patient's medical record

Electronic health record, or EHR. EHRs and EMRs are similar. EMR might be used within a particular practice or setting, and EHR might incorporate data from multiple practices into a more comprehensive record.

PHR, a personal health record. This would commonly refer to an electronic application for patients to record their own personal health information, for their own use, or maybe to share with their providers.

LESSONS FOR AI AND DATA

A few lessons for us about the activities of organizations and their incentives, and a word about lessons for data that might be useful to point out.

There can be important differences in the goals of provider organizations, and their interest in tools and innovations, that are associated with their size and structure, and how they are paid. Not all provider organizations are equally interested in all innovations, or equally able to handle them even if they are interested.

Payment can matter. Practices getting fee-for-service or related types of payments may be open to pursuing new innovations, even high-cost ones, as long as they can bill for and be paid for that. On the other hand, it can happen that provider organizations getting fee-for-service or related payments may not be as eager to adopt new approaches that would reduce their provision of services, which might negatively affect their revenues.

Organizations with more risk, capitation, DRGs, can benefit from pursuing even things that are hard to bill fee-for-service for. They may also be particularly motivated to find cost-reducing things, and may not be as interested in innovations that would tend to increase resource use.

Larger and smaller organizations can also have different capacities to adopt and use new tools. Larger organizations may have substantial resources in house to manage computer systems and related things. Smaller organizations may not.

EMRs or EHRs can be useful sources of data, and the scale of organizations can affect the value. An issue with EMRs is that they may not capture care across multiple organizations.

Hospital payment data that you might get from intermediaries can also be useful and sometimes might be better than just using data from a single provider organization because it can capture bills from multiple providers. Regardless of the specific payment arrangements, hospitals may send pretty detailed bills with patient diagnoses, procedures, and related information to intermediaries.