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The Role and Application of Health Care Best Practices

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This article provides a broad assessment of the role of Best Practices involving four key elements of successful healthcare outcomes:

1. Cost of health care
2. Clinical
3. Patient education and care experience
4. Health care provider education and experience

Such key elements are among the primary contributors to the improvement of population health (i.e., health outcomes for a population of people).

Throughout our country's healthcare history neither single payer nor private payer fee-for-service models have demonstrated effective results to acceptably manage the high costs and inefficiencies of our fragmented health care system. Traditional Medicaid and Medicare single-payer models have tried and missed more than succeeded, as evidenced in part by (1) Medicaid's transition to outsourcing insurance coverage to private payers in order to capitalize on their care management cost saving abilities, and (2) Medicare's inability to keep annual growth to their target sustainable growth rate. Many private payers (insurers) also recognize the challenge but have not yet demonstrated clearly sustainable community-wide improvements in Best Practices based on continuing higher premiums overall.

Vertically integrated health care systems (i.e., hospital/physician integration) have demonstrated a degree of success. However, challenges remain because they are more broadly embedded in the national economics, clinical practices, and business practices of the health care industry, which underscores the broad range of issues needing to be addressed beyond any one payer model.

Unless a payer model is integrally designed and enabled to take on the challenge of creating aligned and effective incentives at both micro- and macro- levels for all health care stake holders regionally and nationally (private insurers, state and federal government, hospital systems, professional providers, drug companies, and patients), it appears unlikely to make large scale sustainable improvements in population health. This article does not propose a specific payer model solution, but rather focuses on the role that Best Practices can play in contributing to better healthcare outcomes regardless of what payer model is in place. For any payment models that exist in the future it is critically important that the models are sensitive to and enable the continuous improvement of Best Practices. To be successful, effective and sustainable payer models may also need enabling legislation to further the ongoing improvement of all aspects of Best Practices.

With the above comments as a backdrop, following are key outcome elements that when combined is integral to the concept of Best Practices:

Cost of Health Care - An overview of determinants

The costs to provide health care services and products by health care institutions and professionals can be defined in different ways:

- The actual costs of a health care provider to deliver services and products
- A provider's commonly billed charges for services and products
- The contractual price the health care provider has agreed to charge, either pursuant to a third party payer's contract (insurer) or government program i.e., Medicare, Medicaid, etc.)
- The sum of health insurance premiums plus patient cost sharing (copays, deductibles, and coinsurance %) required under an insurance policy or health plan

- Additionally, related to health care costs are the Affordable Care Act's individual income tax charged due to gaps an individual's qualified health coverage, and the individual income tax credits for those with lower qualifying household income.

Emphasis in this article is on the contractual prices health care providers have agreed to accept as full payment or what a healthcare provider gets paid in total for rendering a specific medical service, which can vary greatly depending on who receives that service. Examples:

- The type of insurance coverage a patient has and what price his/her insurance company negotiated with the provider for that service; not addressed here are the various approaches to paying providers for services
- The price level for healthcare is determined for Medicaid and Medicare by state and federal governments
- For commercial insurance, price setting is much more complicated, but not always independent of the government-determined rates
- Not addressed in this article: how health insurance premiums and cost sharing generally follow health care provider costs and other economic variables such per capita income, the unemployment rate, labor force supply/need, and covered population health status or risk.

Macro level dynamics also affect commercial prices and unit cost efficiency. Oversupply of a community's health care resources can tend to raise commercial prices unlike traditional economic rules of supply and demand. For example, an oversupply of healthcare resources (i.e., physicians) in a community can actually tend to raise prices. One instance is when a capital-intensive resource expands faster than the demand for that resource (think, growing number of doctor's offices or outpatient facilities with new technology). In this case, the price-per-service needed to maintain that resource must increase in order to recoup fixed costs spread over fewer uses.

A similar dynamic occurs when a capital intensive resource becomes prematurely obsolete before its useful life ends, such as when new technologies disrupt older technologies before their fixed costs have been recouped, causing additional financial burden on the cost of the newer technology. The emergence in past years of improved imaging technology and equipment is an example. The newer technology may also be inherently more expensive to provide, even if not in over supply or burdened with recovery of prior operating losses from the older displaced resource. This situation becomes increasingly more common as our society makes continual and significant technological advances.

Another macro-level burden that increases unit price per service is government programs or payers who do not pay for their share of actual costs, such as Medicaid programs and patients typically without health insurance or the financial means to fully pay for the medical services received. To the extent health care providers incur such financial shortfalls unit costs, and therefore price per service, do increase for the remaining commercial patient base.

To illustrate: A hypothetical medical procedure costs a hospital $1,000 to perform. There are six patients and incurs $6,000 in costs. One patient is covered under Medicaid, which pays the hospital $700 for the procedure. One patient is covered under Medicare, which pays the hospital $1,000 for the procedure. One patient has no insurance and can only pay $100 for the procedure. The total financial shortfall is $1,200. In order for the hospital to cover its overall costs, it must charge each of the three remaining commercial patients a higher price of $1,400 per procedure to recover all its expenses. Insurer provider negotiated prices, and therefore, premiums are directly impacted by such economic issues.

One further macro-level burden is the extent to which an entire population is not covered by adequate health insurance; premiums are necessarily elevated due to spreading health care costs over a smaller base of covered individuals. This dynamic occurs when significant numbers of healthier individuals (i.e. typically have lower medical costs than average) are not covered by adequate health insurance, increasing the average cost per remaining covered person.

There are microeconomic factors that impact prices as well. Regional market dynamics impact the leverage that hospitals, provider groups and insurers/health plans have in price negotiations. But not to be overlooked are the actual operational costs and financial incentives of all stakeholders. Highly efficient care (i.e., where higher quality medical care meets lower costs) along with improvements in the prevention and effective management of diseases do result in lower prices. Well-managed vertically integrated health care organizations are one example.

The remainder of this article discusses how integrated data resources including clinical, provider, patient, and price data can improve stakeholders' knowledge to move our population continuously toward higher efficiency.

The Value of Clinically Integrated Data

There is a high value in developing population-wide, continuously updated, longitudinal clinical databases accessible to medical professionals and researchers by patient cohorts, symptoms, diagnoses, treatments, patient compliance, clinical results, etc. across a broad spectrum of diseases. Such data can be continuously updated in real time using technological applications such as electronic institutional records transmitted over the Electronic Data Interchange (EDI), electronic medical records under commonly defined data elements and system interoperability.

Performance reports could be generated periodically from such a database to inform health care professionals and organizations regarding their comparative performance across several measures throughout the continuum of care. Reports can highlight changes over time as well as comparative differences with peers and other health care institutions. When such data are integrated with relative cost measures and patient perceptions, a more complete picture of health care would become available than exists currently at a population level. From such periodic performance reports health care professionals and institutions could quickly identify opportunities for improving clinical results, the care process, costs, and patient satisfaction, compliance and education. Longitudinally, performance results from a provider's prior initiatives can be observed and compared to peer performance.

An example of valuable integrated performance reporting is the opportunity for a physician or medical group to observe and compare their patients' clinical outcomes for a chosen disease, like diabetes, linking A1C test results with patient satisfaction and comments, maintenance drug compliance, and total cost per patient. The physician could then compare such results with prior periods, before any new protocols had been implemented, to assess effectiveness, or compare results with peer groups' outcomes ranked by performance results to identify improvement opportunities.

When such data are integrated with relative cost measures and patient perceptions, a more complete picture of health care would become available to stakeholders than exists currently at a population level. If key performance measures were then linked to financial incentives, providers would have additional motivation and support to improve clinical service quality, reduce unnecessary variation in the care process, improve patient satisfaction, and ultimately, the cost of care. Effective incentive measures would need to be developed carefully to provide equity among providers and properly account for inherent conditions and circumstances that inappropriately bias the performance results. One example is the availability of highly efficient specialty providers accessible within a community.

The Value of Patient Education and Care Experience

A key element in Best Practices is recognizing the role patients play in maintaining or improving their health status to the extent possible by:

- Learning and living a healthy lifestyle
- Helping to achieve optimum clinical outcomes by complying with clinical regimens when needed in the course of treating or managing diseases
- Providing timely feedback to health care professionals and institutions regarding their care experience.

When fully engaged, patients can positively affect clinical service quality and clinical outcomes, which, in turn, helps to manage the cost of healthcare. While being fully engaged is a personal responsibility, health plans and health care providers can enhance population and patient engagement. For example, health plans may provide incentives like member education programs in disease prevention and management (when indicated) and cost sharing incentives in the course of care (particularly when managing chronic diseases) such as waiving copays for diabetic supplies, equipment and periodic tests. Health care providers and institutions can be better informed when there is an opportunity to interact.

To fully realize the benefits of population and patient engagement, there needs to be a continuous collection of population-wide data around patients' understanding/expectations, self-reported health status, impressions and satisfaction with their care experience, exchanges and communications with their health care professionals, experience with service quality and personal perceptions of clinical quality, etc. collected selectively over time. When surveying patient experience for consistency and accuracy, it's critical that questionnaires are completed at appropriate times following care, like immediately for impressions of service quality and at prescribed intervals following a surgical procedure.

Such information, integrated with clinical and cost data noted above, can provide valuable insights to inform and improve patient education and expectations, patient compliance with medical advice and instructions, satisfaction with clinical service quality and personal perceptions of clinical quality. An example is to understand how well medical staff explained needed follow up care to a patient along with the patient's compliance and any unfavorable side effects. Armed with such ongoing information, health care providers can develop a more thorough knowledge of what and how to improve many aspects of clinical service quality, clinical outcomes, patient education and expectations, and ultimately, costs.

The Value of Health Care Provider Education and Experience

Beyond supporting efforts to manage health care more efficiently, integrated population-wide databases can be used to:

- Monitor and improve evidence based medical knowledge
- Improve service quality and patient experience
- Reduce unnecessary variation in care processes and cost outcomes

> "Comparative analyses can provide a knowledge base to update and inform clinical and cost education efforts of the health care provider community."

Using such data in ongoing comparative analyses can provide an ever-expanding knowledge base (managed by appropriate stakeholders) to update and inform clinical and cost education efforts of the health care provider community. Such efforts are usually limited to the more advanced vertically integrated health care systems and payers, often involving only specific provider groups, and are usually focused on a few higher cost target diseases. A broader application can benefit more people at a faster pace than the present. An example is the opportunity for physician to observe and respond to ongoing population-wide outcomes for diseases of interest compared to peers or the physician's own outcomes compared to prior periods. In essence a population can be served better for more diseases by an ongoing process that provides comprehensive information across the continuum of care.

Conclusion

Integrating clinical records, patient perceptions, and prices population-wide would be a major undertaking if multiple payers were included, requiring funding and incentives for the stakeholders to participate. Patient data would need to be de-identified to protect individual privacy. Price data are very sensitive information and would need to be reduced to an indexing scale across the continuum of care to be useful yet protect proprietary information. To gain acceptance by the health care provider communities, key data elements and performance reports' contents and formats need to be designed with mutual agreement among the stakeholders and an ongoing process of data validation

implemented. Other logistic challenges would need to be solved in such a process, but would appear feasible with adequate funding and incentives for stakeholders. Short of a multi-payer integrated database inclusive of the key outcomes, individual payers may take on the challenges of a more comprehensive information process to help inform and improve key outcome measures such as clinical quality, service quality, provider education and cost awareness, patient education and satisfaction, and the cost of health care.

This article is intended to educate all interested readers, appeal to stakeholders and all who can influence key aspects of health care and the financing needed to enable and/or build broader population based processes of integrated health care data, analysis and education. By doing so, they can help make continuous population-level improvements in the key outcomes a reality.

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