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# Chronic disease excellence: “Service line 2.0” for health systems?

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# Chronic disease excellence: “Service line 2.0” for health systems?

*Having a strategy to attract and better serve patients with chronic disease will be critical for health systems to ensure growth in uncertain times.*

Conventional wisdom states that the Affordable Care Act delivered a growth benefit to providers by increasing coverage levels. While it is true that patient volumes rose between 2013 and 2016, the payer mix at most hospitals shifted away from commercial group business to less profitable or margin-negative segments.<sup>1</sup> As a result, overall margins often remained flat or declined,<sup>2</sup> and many providers did not realize a positive return on invested capital.

Looking ahead, most of the growth in covered lives is likely to occur in Medicare as the 65+ age group increases to about 20% of the population by 2030 (from 13% in 2010).<sup>3</sup> Medicaid, which is the largest payer class, will likely also see growth. Over the same time, overall commercial group volumes and reimbursement levels are projected to remain unchanged.<sup>4</sup>

To maintain financial sustainability and maximize value in a flat commercial market, providers will need to look for new ways to achieve profitable growth by attracting patients with high medical need and capturing a greater “share of wallet” among these patients. Doing this is not simple—it requires an integrated approach spanning the care continuum, with a focus on outcomes, quality, and consumer experience. As health systems rethink their growth strategy with this goal in mind, the key patient segment they will need to focus on is patients with chronic disease.<sup>5</sup>

Consider:

- About half of all US adults have at least one chronic disease, and prevalence is rising in the commercially insured population (Exhibit 1).<sup>6,7</sup>
- Healthcare utilization is more than twice as high among chronic disease patients as among those without chronic disease; inpatient utilization is as much as four-fold higher.<sup>8</sup>
- For commercially insured patients with at least one chronic disease, average annual per-person spending is about \$8,900, compared with \$1,700 for persons without chronic disease.<sup>9</sup> Furthermore, across all types of insurance, spending is markedly higher among patients with comorbidity.<sup>10</sup>
- Patients between ages 45 and 64 have 1.8 times the prevalence of chronic disease as do those ages 20 to 44<sup>11</sup>; for health systems, they also have the highest revenue intensity of all age bands. Our analyses indicate that patients in the 45-to-64 age band represent about 70% of industry EBITDA, even though they account for only about 30% of admissions.<sup>12</sup>

Most systems continue to orient their strategy for chronic disease patients around service lines defined by clinical specialty (e.g., cardiovascular, neurosciences, orthopedics). In doing so, they take an episodic view focused on high-dollar acute care treatments (usually procedures and services immediately surrounding

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the procedure, such as rehabilitation after joint replacement). We propose an alternative view of service lines—one oriented around a holistic assessment of lifetime care needs. This approach, which we have termed “service line 2.0,” can more than double the value accessed per life<sup>13</sup> while improving outcomes, care quality, and patient satisfaction. In addition, it can help systems build the core capabilities required for value-based care.

## Why an alternative approach

### *The profile of chronic disease utilization and its implications for providers*

#### **Single acute-care episodes represent a minority of annual healthcare spending.**

Among healthy individuals, high claims costs often result from a single expensive hospitalization (as might occur, for example, after a motor vehicle accident). Among patients with chronic

## EXHIBIT 1 Prevalence of common chronic diseases in the US

Disease <sup>1</sup>	Among Medicare FFS beneficiaries, % <sup>2</sup>		Among commercial beneficiaries, %	
	National	5-year trend in prevalence <sup>3</sup>	National	1-year trend in prevalence <sup>3</sup>
Hypertension	55.4	↑	12.6	↑
Hyperlipidemia	44.9	↑	12.1	↑
Rheumatoid arthritis/ osteoarthritis	29.2	↑	4.7	↑
Diabetes	26.9	↑	5.0	↑
Ischemic heart disease	27.7	↓	2.3	↑
Depression	15.8	↑	7.1	↑
Chronic kidney disease	16.0	↑	1.2	↑
Heart failure	14.1	↓	0.6	↑
COPD	11.2	↓	1.3	↑
Alzheimer's disease and related disorders	10.3	↓	0.1	↑

COPD, chronic obstructive pulmonary disease; FFS, fee for service.

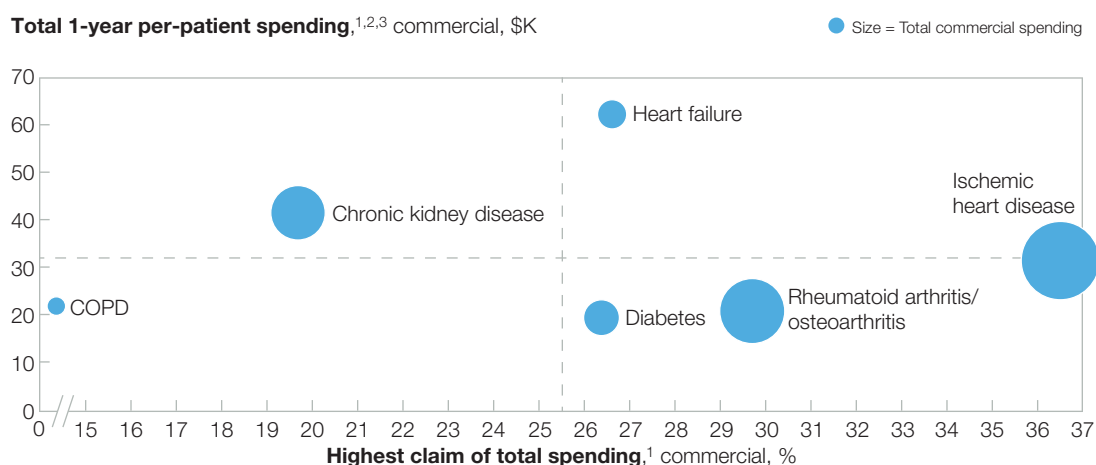
<sup>1</sup>Chronic diseases listed were the ten most common in prevalence among the combined Medicare and commercial populations in 2013. A review of more recent data indicates that prevalence among Medicare beneficiaries has not changed by more than 100 basis points (bps) for most of the listed diseases, except for ischemic heart disease (120-bps decrease) and chronic kidney disease (210-bps increase).

<sup>2</sup>Data for Medicare FFS beneficiaries 65 years and older.

<sup>3</sup>National prevalence change: Medicare 2008–13 and commercial 2012–13.

Sources: CMS Medicare Geographic Variations File, 2007–13; McKinsey analysis of Truven commercial claims data

## EXHIBIT 2 Proportion of chronic disease spending attributable to the highest claim



COPD, chronic obstructive pulmonary disease.

<sup>1</sup>“1 year” includes the 6 months before and 6 months after the event associated with the highest claim; includes total medical spending across all sites of care as well as pharmaceuticals.

<sup>2</sup>Average highest-dollar hospital claim was identified for patients within each disease category in 2013 commercial claims data.

<sup>3</sup>Dotted lines represent the averages for each axis (\$33,000 for 1-year spending, 26% for highest claim as a percentage of total value).

Source: McKinsey analysis of Truven commercial claims data

disease, however, the claim for even the most expensive single event usually accounts, on average, for no more than 37% of total annual claims costs (Exhibit 2).<sup>14</sup> This finding reflects the recurring nature of healthcare utilization that is common among chronic disease patients. (For example, within a single year, a diabetic patient with coronary artery disease might require angioplasty/stent placement as well as eye surgery for diabetes complications.) To improve outcomes and maximize value capture, health systems need to serve these patients for more than just a single acute-care event. This new approach usually requires crossing traditional service line silos.

### Chronic disease patients are usually loyal to the provider they use first.

Typically, more than 90% of inpatient and hospital-based outpatient claims for a given person with chronic disease come from a single health

system.<sup>15</sup> Consistent with this, the participants in our Consumer Health Insights survey who reported having chronic disease were more apt than other respondents were to say that they had a primary care physician (PCP) and to make an appointment with a specific provider when they needed care.<sup>16</sup> These observations highlight the importance of early engagement with chronic disease patients.

**Diseases with high per-life spending are often preceded by diseases with low per-life spending.** Two interesting patterns emerge when chronic diseases are segmented based on spending (Exhibit 3).

- *Conditions with relatively low prevalence but high per-life spending.* These patients have higher-intensity care needs and thus often present greater economic value for health

systems. We estimate, for example, that each incremental commercially insured heart failure patient could potentially add about five times the revenue (and therefore EBITDA) than would patients with hypertension or hyperlipidemia.

- *Conditions with higher prevalence but lower per-life spending.* Many of these conditions are precursors to more severe diseases with higher-intensity care needs. Our research shows, for example, that 71% of patients with heart failure have hypertension, 53% have hyperlipidemia, and 37% have diabetes.<sup>17</sup> Given the provider loyalty common among chronic disease patients, most health systems could benefit by moving “upstream” to engage with these individuals while they have a lower-

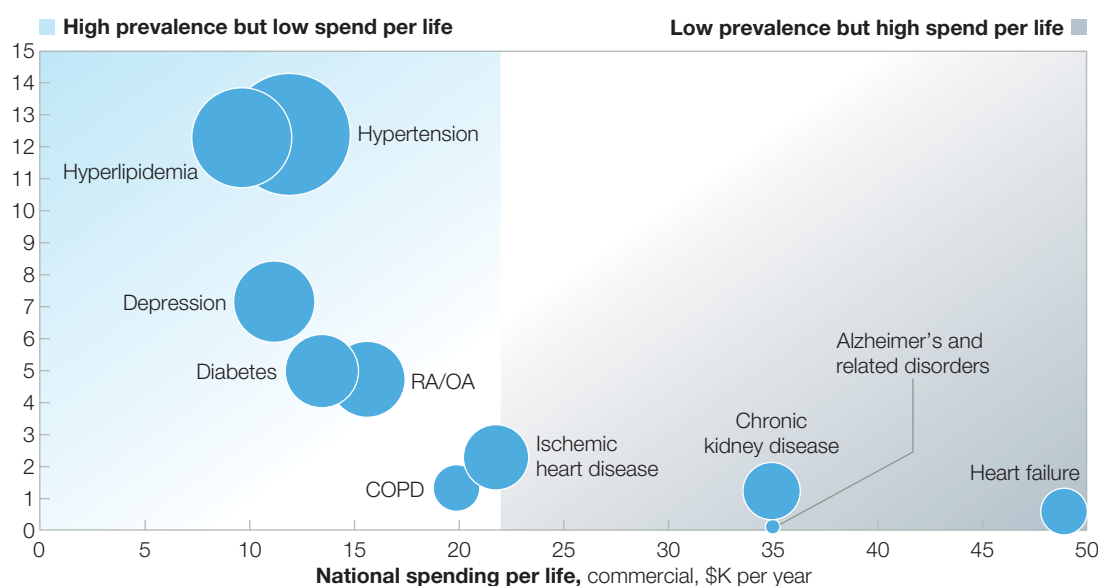
morbidity condition. Furthermore, given the high prevalence of these conditions, increasing the share of wallet captured could add significant value for systems that can serve these patients’ needs successfully. To engage with these patients early, many systems will need to strengthen their ability to provide them with care in ambulatory settings or via new modalities (e.g., telemedicine, health apps). The extent to which a system should invest in these areas should depend on its existing asset footprint and ability to serve downstream care needs, as well as local market dynamics and competition for downstream care.

### Most healthcare utilization for common chronic diseases occurs within assets

## EXHIBIT 3 Relative size of spending among chronic disease patients

National prevalence,<sup>1</sup> commercial, % of total lives

● Size = Total commercial spending<sup>2</sup>



COPD, chronic obstructive pulmonary disease; OA, osteoarthritis; RA, rheumatoid arthritis.

<sup>1</sup>Diseases included above are the 10 most prevalent diseases among commercial and Medicare lives nationally.

<sup>2</sup>Refers to total spending across all claims for these patients.

Source: McKinsey analysis of Truven commercial claims data

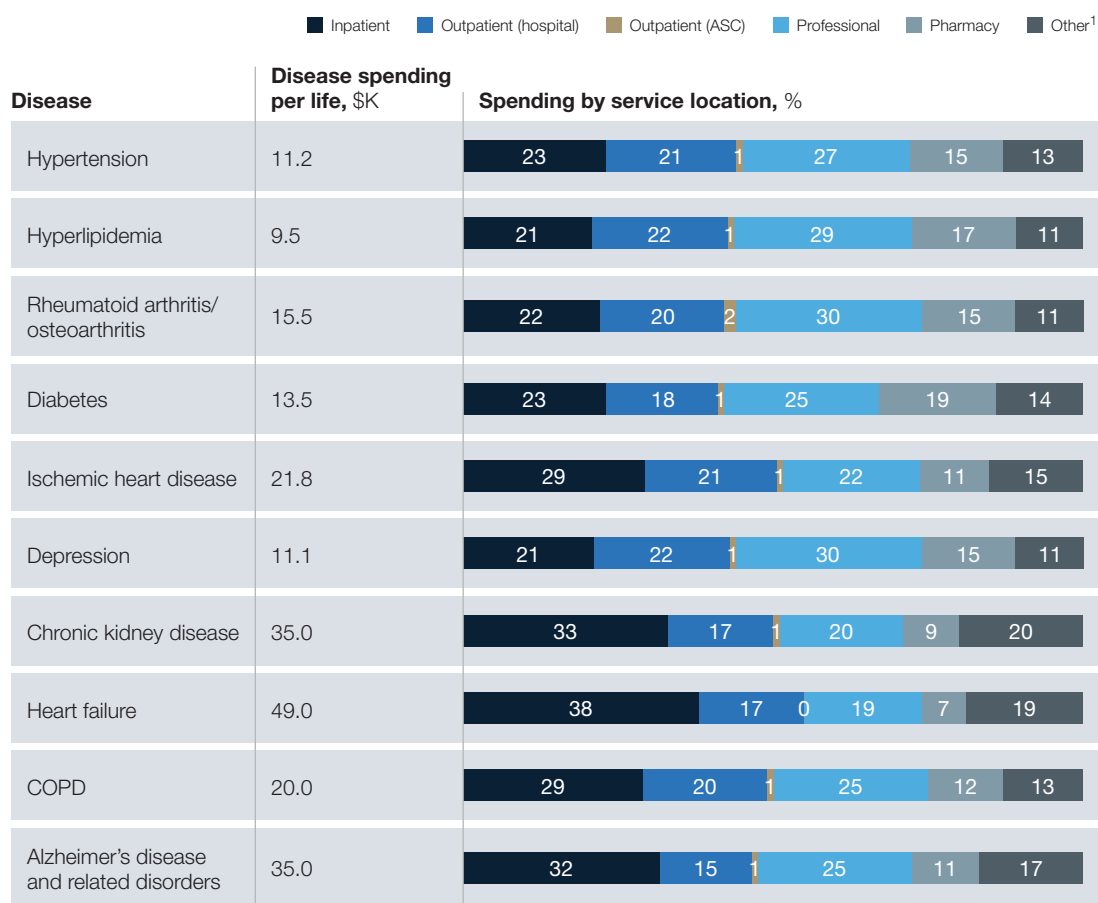
**typically owned by health systems.**

Although utilization usually entails multiple encounters, between 65% and 75% of the spending for chronic disease patients results from hospital inpatient, hospital outpatient, and professional billing (Exhibit 4). All three settings are squarely within the grasp of most health systems. However, a high degree of physician alignment is required if a system wants to capture most of the revenue from these sources.

**Upstream engagement is better for patient care and will likely be financially positive to the provider, even under fee-for-service (FFS) reimbursement.**

A natural question about a strategy focused on upstream engagement is the extent to which it might prevent downstream interventions (e.g., an aggressive weight loss and exercise regimen could delay or prevent the need for knee replacement in a patient with osteoarthritis).

**EXHIBIT 4 Spending on chronic disease patients by settings of care**



ASC, ambulatory surgery center; COPD, chronic obstructive pulmonary disease.

Numbers may not sum to 100%, because of rounding.

<sup>1</sup>“Other” includes home health, hospice, nursing homes, outpatient clinics (non-hospital, non-ASC), dialysis centers, freestanding emergency departments, rehabilitation facilities, residential facilities, and other specialty facilities.

Source: McKinsey analysis of Truven commercial claims data

## How providers should think about strategy development

Health systems can use a three-step approach to develop a chronic disease strategy systematically. Outlined here are the key questions they need to consider:

### Step 1: Opportunity identification and prioritization

The goal of this step is to understand the chronic disease landscape in a given local market by answering the following questions:

- What is the total lifetime value of chronic disease patients ages 45 to 64 in the market of interest?
- Which are the diseases and patient segments with the highest uncaptured value?
- What assets are available to the organization? What capabilities exist to use these assets for engaging chronic disease patients? Can they be scaled across sites of care when necessary?
- Based on the value at stake and available assets, what diseases should be prioritized for targeting?

### Step 2: Solution design

This step focuses on creating an integrated program for the prioritized diseases. Key questions to be answered include:

- Where in the target chronic disease patient journey does the health system have the

greatest opportunity (e.g., improving in-system follow-up after an emergency department visit)?

- What additional channels should be leveraged to attract patients? The answer is likely to include direct-to-consumer approaches, health system assets (e.g., facilities and/or physicians), and relationships or contractual arrangements with payers to manage specific patient populations.
- What engagement strategy should be used for each channel? Which strategies have the clearest business case associated with them?

### Step 3: 'Test and learn' using pilots for the highest-priority initiatives

As in any paradigm shift, successful adoption of service line 2.0 requires building momentum within the organization using a series of well-chosen, market-level pilots.

- What operating model will be needed to deploy these strategies effectively? Who are the key stakeholders at each level (e.g., primary care, relevant specialists)?
- Which engagement models or interventions can be deployed? How can improvements to the patient journey—and their effect on patient behavior and loyalty—be rapidly tested?
- How should the new model be refined? What additional assets will have to be built over time?

tis). Prevention is clearly a desirable outcome from a clinical standpoint but could present an economic challenge in a FFS environment. As systems assess this trade-off, they should consider two issues:

- *The likelihood of preventing the downstream event vs. the incremental volume that could be achieved through early engagement.* Research suggests that about 8.5% of inpatient utilization could be prevented through better management of chronic disease, and that chronic disease patients account for about 79% of all inpatient admissions.<sup>18,19</sup>
- *The impact of transparency and the shift to value-based reimbursement.* The frequency of, as well as the reimbursement for, downstream events is likely to decline because of the ongoing move toward better ambulatory care, enhanced outcome measurement and reporting, and value-based reimbursement.

**The loyalty of high-needs patients has value in all payer segments, regardless of the reimbursement mechanism.**

By engaging these patients early and serving their needs more holistically, a health system can increase their loyalty, “attaching” them to the system. Establishing loyalty and early attachment among high-needs patients with chronic disease is optimal for everyone in the value chain—it improves patient experience and outcomes by providing necessary care in a timely manner; it lowers the cost of preventable care; and it drives profitability for health systems, regardless of whether they are paid under fee-for-service or value-based-care reimbursement.

Given all the factors discussed above, we believe health systems should fundamentally shift toward becoming chronic disease “aggregators/

managers”—viewing themselves as stewards who help chronic disease patients navigate their care journey by guiding their education and decision making across the continuum of care. While other stakeholders are likely to compete for this role, health systems are particularly well equipped, given their broad asset base, access to capital, and clinical depth, as well as the investments they have already made in electronic health records (EHRs). To achieve this goal, however, most health systems will need to break down internal silos based on specialties and/or sites of care, and embrace the evolution away from an acute-care delivery platform centered on flagship tertiary-care hospitals.

In the next section, we outline the core elements of this integrated approach, which we call service line 2.0.

## How service line 2.0 is different

### *Core elements of a chronic disease strategy*

Most health systems already include patients with certain chronic diseases (e.g., heart failure) in their traditional service line planning process, and many of them have adopted a multichannel approach (e.g., by including physical therapy in their joint replacement programs). So, what do we propose health systems do differently? Service line 2.0 requires both scale in clinical care and a fundamental shift from episodic to longitudinal interactions with patients. The latter, in turn, requires that health systems orient themselves around a patient’s lifetime care needs rather than a single episode of care (such as joint replacement or cardiac surgery). To do this, health systems must be able to identify—and engage early with—patients likely to have high lifetime care needs before they require acute



care or intensive ambulatory care (e.g., patients with advancing rheumatoid arthritis who would benefit from starting immunosuppressive therapy). The goals are twofold: to ensure that most utilization is captured within the system and to identify undertreated conditions to improve outcomes and maximize value.

Any approach used to achieve these goals is likely to entail changes in strategic and clinical planning. Health systems will need to create a value proposition for chronic disease patients based on integrated offerings built on a comprehensive understanding of the patients' care needs. The offerings must include tailored clinical pathways, one-stop shopping for critical services, convenient locations for ancillary needs, care coordination, and navigation (Exhibit 5).

To successfully develop such an integrated offering, health systems should consider five core elements:

**Disease/condition-based clinical program development.** Many health systems have already undertaken programs to improve clinical quality and patient satisfaction by increasing interdisciplinary coordination. However, a focus on the lifetime care needs of chronic disease patients may require these programs to broaden their scope beyond a single specialty or single episode of care. For example, care pathways may need to be re-envisioned so they are oriented around patient segments (e.g., 40- to 50-year-old, tech-savvy patients with poorly controlled diabetes) rather than specialty silos. The pathways must be supported by the right mix of providers, physical services, and equipment, all conveniently located and coordinated.

**Patient identification analytics.** To implement service line 2.0, health systems must be

able to identify patients likely to have high lifetime care needs before they require acute care. In particular, systems should seek to identify and engage with those chronic disease patients likely to require longitudinal specialty follow-up (and possibly procedural intervention) in the relatively near term (e.g., a patient with advancing chronic kidney disease who is likely to soon be a transplant candidate). Once the need for a procedure or other specialized care has been established, these patients are likely to be harder to attach for two reasons. First, they will now be targeted by traditional service line-driven marketing from multiple health systems in an increasingly competitive market. Second, they are likely to be more actively researching and “shopping” for their care and therefore more likely to encounter messaging from competitors.

To identify appropriate patients, health systems must have access to clinical data from ambulatory settings and the analytics needed to segment patients. A key requirement is a central data repository that houses standardized data throughout the care continuum. The analytics can be built on EHR integration efforts already underway, but in the future, they will likely also need to incorporate external inputs (e.g., patient-provided data via messaging, wearables).

**Patient engagement tools.** To gain the loyalty of high-need patients, health systems must be able to attract and retain them in ambulatory settings and, when necessary, transition them seamlessly from pre-acute to acute care. Our Consumer Health Insights survey has shown that many chronic disease patients are taking increased responsibility for their health (e.g., by exercising choice in their PCP selection).<sup>20</sup> Other research we have done indicates that these patients are particularly interested in using digital tools to help them manage their disease.

Technology companies are responding with a proliferation of remote monitoring devices, mobile apps, and other tools aimed at these patients. As health systems consider the spec-

trum of investments they could be making, they will need to have a solid understanding of their goals in adopting the technologies, the needs and preferences of their target patients (espe-

## EXHIBIT 5 Transforming a care journey using a chronic disease strategy

ILLUSTRATIVE



**Jim is a 54-year-old patient** with diabetes being treated with insulin. He takes his medications regularly, but has trouble keeping his follow-up appointments due to his work schedule. He realizes he needs to make lifestyle changes and has seen a nutritionist once, but has had difficulty sticking to his diet and exercise regimen. He has a smartphone that he uses regularly for email, messaging, and browsing.

*Jim is seen for the first time at an affiliated urgent care center for flu-like symptoms...*

### Key service line 2.0 program components

#### Clinical programs

- Jim's care plan is based on comprehensive, up-to-date guidelines that include clinical and lifestyle recommendations
- Updates to his care plan flow through automatically to the analytics engine, as well as physician and patient interfaces

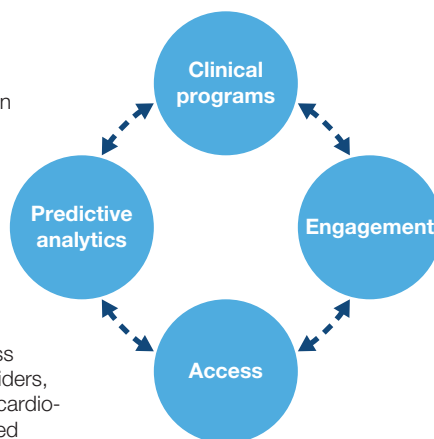
#### Predictive analytics

##### At first contact...

- Caregivers are prompted by Jim's EHR to give him information about the integrated program for high-risk diabetic patients
- A follow-up appointment with his primary care physician is made before discharge

##### Ongoing...

- Integrated inputs from the EHR, Jim's tracking devices, and text messages create regular progress dashboards for Jim and his providers, and anticipate care needs (e.g., cardiology follow-up because of reduced exercise tolerance)



#### Access

- Co-located providers allow Jim to see his primary care physician and nutritionist, and have his cardiology check-up the same day, during a visit he scheduled through his wellness app
- Jim is able to chat online with his patient navigator and/or other providers as required, and do e-visits if appropriate

#### Engagement

- Digital tools empower Jim to take charge of his care journey and provide an interface to his caregivers<sup>1</sup>
- A Bluetooth-enabled glucometer feeds results directly into Jim's EHR
- Diet- and medication-tracking apps record intake and make recommendations, including follow-up appointments
- Fitness-tracker app helps Jim maintain his exercise regimen; it also pairs with wearable sensors that detect irregularities in vital signs during exercise that would trigger the need for caregivers to review Jim's medical record

EHR, electronic health record.

<sup>1</sup>The tools are provided free of charge to Jim. The health system has outcome-based contracts with vendors that ensure value capture and/or receives reimbursement from payers (e.g., using CPT 99490).

cially the highest-value segments), and the highest-value portions of the relevant patient journeys. For example, chronic disease patients who are likely to need near-term specialty follow-up might benefit from having dedicated care coordinators or patient navigators, supported by digital self-care tools that offer proactive, trigger-based engagement (e.g., a call from a nurse after two consecutive missed doses or abnormal glucometer readings) and/or automated alerts to encourage treatment compliance (e.g., reminders for regularly scheduled laboratory tests and office visits). Such tools should integrate seamlessly with digital tools that improve access to needed services within the system (e.g., open scheduling, interactive chats with providers, e-visits). In all cases, the tools will have to be deployed strategically across channels, since these patients might first be seen in an urgent care clinic or emergency room, not just in primary care offices.

However, the use of patient engagement tools should not be confined to the highest-value patient segments. A broader and lower-intensity engagement model can improve the patient experience for all of those with chronic disease and be an important source of data to identify patients with intensifying care needs. In this model, the tools used should help patients manage their conditions; examples include remote health monitoring, medication adherence assistance, automated medication refill and delivery, refill and benefits tracking, and online support groups. These tools are increasingly becoming reimbursable, which gives health systems another source of revenue as they consider their investments.<sup>21</sup>

**Multidisciplinary physician/provider alignment.** Service line 2.0 requires health systems to evolve their physician alignment approach and focus on more than immediate referrals. The new goal is to create a truly inte-

grated, high-quality experience built on seamless data sharing, collaborative care pathway design, and proactive communication to patients and caregivers about emerging care needs (regardless of which specialty will ultimately deliver that care). This approach must also recognize the importance of physician extenders and nonclinical support staff.

**Improved access to care.** All the above measures require that health systems be able to provide patients with timely access to care. To ensure access, many systems will need to undertake two key initiatives: to maximize operational efficiency (especially in the ambulatory setting) and to optimize their asset footprint. A service line 2.0 approach will likely accelerate a system's ongoing footprint shift toward ambulatory assets. Moreover, it can provide valuable input into capital planning, helping systems concentrate their ambulatory and digital investments in geographies and care segments where the greatest value can be created.



As we have shown, service line 2.0, a strategy focused on chronic disease, could transform a health system's strategic and operational priorities. Given the value at stake and the strategy's ability to improve patient care and reduce costs, we believe significant advantage exists for health systems that take the lead on this redesign of service lines. ○

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## FOOTNOTES

- <sup>1</sup>About 75% of the growth occurred in Medicare and Medicaid. Volumes in the commercial group segment grew 2% from 2013 to 2016, relative to 7% growth across all segments. As a result, commercial group as a percentage of overall volume declined (i.e., payer mix shifted away from the commercial group segment). While the individual segment showed more growth, some of the growth resulted from migration from the more profitable commercial group segment.
- <sup>2</sup>The Medicare Payment Advisory Committee reported a 40-bps decline in mean all-payer margin for hospitals from 2013 to 2015 (MedPAC Report to the Congress: Medicare Payment Policy, 2017). Moody's described a median all-payer margin decline of 70–80 bps for nonprofit health systems between 2015 and 2016. (Moody's press release. Preliminary FY 2016 US NFP hospital medians edge lower on revenue, expense pressure.)
- <sup>3</sup>2010 US Census projections.
- <sup>4</sup>McKinsey PRISM 2.0 analysis based on projections of utilization, acuity, and reimbursement trends. Historic trends were assessed based on utilization and acuity data from the Kaiser Family Foundation, the Healthcare Costs and Utilization Project, and the Centers for Medicare and Medicaid Services. In addition, we looked at recent trends in commercial payment-to-cost ratios as reported by the Medicare Payment Advisory Committee.
- <sup>5</sup>The definition and classification of chronic diseases, as discussed here, follows the algorithm used by the CMS Chronic Conditions Data Warehouse (CCW) and is based on the appearance of predefined ICD-9/ICD-10 codes on claims. Depending on the specific condition, codes may need to appear consistently over time and in certain sites of care. (ICD-9/ICD-10 refers to the ninth and tenth revisions of the *International Statistical Classification of Diseases and Related Conditions*.)
- <sup>6</sup>The Centers for Disease Control and Prevention estimates that about 117 million US adults (49.8% of the adult population) have at least one chronic disease (CDC.gov. Overview of chronic conditions).
- <sup>7</sup>McKinsey analysis of Truven 2013 commercial claims data. This dataset represents approximately 40 million patients.
- <sup>8</sup>Robert Wood Johnson Foundation. *Chronic Care: Making the Case for Ongoing Care*. 2010.
- <sup>9</sup>McKinsey analysis of Truven commercial claims data.
- <sup>10</sup>Spending on healthcare increases more or less linearly with the number of chronic conditions for patients who have one to five conditions. For example, individuals with three chronic conditions have approximately three times the spending of those with one chronic condition. (Robert Wood Johnson Foundation. *Chronic Care: Making the Case for Ongoing Care*. 2010.)
- <sup>11</sup>The percentage of all chronic disease patients who have two or more conditions has been estimated to be about 40% in the 20-to-44 age band and more than 60% in the 45-to-64 age band. (Robert Wood Johnson Foundation. *Chronic Care: Making the Case for Ongoing Care*. 2010.)
- <sup>12</sup>McKinsey analysis of a blinded sample of 2015 claims for a large health system with operations in multiple states (excluding obstetrics and neonatal intensive care volume).
- <sup>13</sup>Compared with a system that captures only the highest-dollar claim (see Exhibit 2).
- <sup>14</sup>McKinsey analysis of Truven 2013 commercial claims data.
- <sup>15</sup>McKinsey analysis of claims (inpatient and outpatient) for individuals included in the 2013 Truven commercial claims dataset who had more than one inpatient or hospital outpatient department claim in a one-year period.
- <sup>16</sup>Cordina J et al. Debunking common myths about healthcare consumerism. McKinsey white paper. December 2015.
- <sup>17</sup>McKinsey analysis of commercial claims from the Truven database.
- <sup>18</sup>This estimate is based on a study that showed that, in 2012, about 14% of all admissions were considered potentially preventable through better ambulatory care, and of the preventable admissions, about 60% were related to chronic disease. (Fingar KR et al. Trends in potentially preventable inpatient hospital admissions and emergency department visits. Healthcare Cost and Utilization Project. Healthcare Cost and Utilization Project Statistical Brief 195. November 2015.)
- <sup>19</sup>Robert Wood Johnson Foundation. *Chronic Care: Making the Case for Ongoing Care*. 2010.
- <sup>20</sup>McKinsey Consumer Health Insights Survey, 2015.
- <sup>21</sup>For example, CPT #99490 is a new code that can be used to claim reimbursement for non-face-to-face care coordination for patients with more than two chronic conditions.

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