

# Is a Strategy Focused on Super-Utilizers Equal to the Task of Health Care System Transformation? Yes.

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The super-utilizer (SU) strategy is pivotal to health care system transformation.<sup>1</sup> Super-utilizers are patients with high medical costs from recurring, preventable inpatient or emergency department (ED) visits.<sup>2</sup> Although super-utilizers represent 5% of the population, they account for 50% of health care expenditures.<sup>3</sup> The SU strategy focuses on reducing these expenditures by reducing preventable hospital visits, employing a strategy based on data,<sup>4</sup> stakeholder engagement, and clinical redesign. It is clear that system transformation requires fundamental changes to produce high value care or improved outcomes at lower cost.<sup>4</sup>

The SU strategy was developed when Dr Jeffrey Brenner translated law enforcement hotspot concepts to medicine, identifying and then allocating resources to outliers of hospital utilization in the same way police departments identify and staff high crime areas.<sup>5</sup>

Community-based care coordination is a home-visit program that connects super-utilizers with primary care and community resources, and is the crux of SU clinical redesign.<sup>2</sup> Care coordinators (licensed practical nurse, medical assistant, or social worker) work with super-utilizers to abate social determinants that contribute to high utilization and expenditures (ie, lack of transportation, lower education, housing insecurity).

Program administrators (registered nurse and program manager) and health coaches comprise the multidisciplinary care coordination team. The team is supported by a dynamic data infrastructure that identifies super-utilizers, tracks utilization and spend-

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ing trends, reports outcomes, and supports continuous process improvement. The strategy aligns patients' needs and community assets through stakeholder engagement, creating partnerships between patients, teams, payers, community, and health care resources.<sup>7</sup> In Camden, New Jersey, a study is underway to evaluate this model's outcomes and potential cost savings.

One doesn't have to wait for results of the Camden study to find data supporting key elements of the SU strategy. A nurse-led care coordination program in Doylestown, Pennsylvania has demonstrated improved outcomes and lower expenditures among Medicare beneficiaries for over 10 years.<sup>8</sup> This randomized control trial demonstrated a 25% lower mortality risk, and in the highest risk population—defined as ≥1 admission in the past year along with a diagnosis of heart failure, coronary disease, or COPD—a 36% reduction in Part A and B Medicare expenditures.<sup>8,9</sup>

The early success of these and other emerging programs is guiding policy. An SU learning collaborative not only developed key policy recommendations, but is working at the state level to advocate for reform.<sup>10</sup> Combined data from 3 of the programs demonstrated a 34% reduction in hospital admissions and savings of \$1.2 million over 12 months.<sup>10</sup>

Health care system transformation will occur under this strategy, as a result of intentional learning<sup>2</sup> with implications for policy. Super-utilizers are "super-detectors," helping to clearly identify system inefficiencies and their link to low-value care. A common observation among SU programs is the detrimental impact of social determinants on health.<sup>11,12</sup> The "medicalization" of social determinants directs resources to higher cost medical care rather than addressing social needs, resulting in recurring high cost, low effectiveness care. In a striking example in Trenton, New Jersey, a super-utilizer visited the hospital 450 times in 1 year.<sup>13</sup> Unstable housing was noted as a major contributor to her utilization. After securing stable housing, her hospital visits dropped the following year to 12.<sup>13</sup>

Can developing delivery models for a segment of the population equate to system transformation? Yes, when tied to alternative payment methods; real-time utilization data; easily accessible, state supported health information exchanges<sup>10</sup>; and resource allocation to address social determinants. For scalability, the strategies' processes must be data-informed and deliver on outcomes. As health care expenditures overwhelm federal and state budgets and force difficult decisions regarding coverage and services,<sup>14,15</sup> the SU strategy is the meeting point for the value mandates to improve care and reduce expenditures. Focusing on super-utilizers positions us to help patients who often aren't getting the kind of care they need while creating the greatest short-term return on investment with cost savings to the system. Fortunately, the Affordable Care Act is serving as a vector to scale SU strategy through State Innovation Model grants.<sup>16</sup>

Improving care delivery for super-utilizers will transform overall health care delivery because the strategy doesn't patch the holes in the system, but rather provides a framework for changing the system. By using data to highlight the discrepancy between health expenditures and outcomes, resource allocation is a powerful lever to move toward a high value health care system. The multifaceted approach of this strategy, rooted in data, clinical redesign, and stakeholder engagement, is equal to the task of health care system transformation.

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**Key words:** super-utilizer; care coordination; delivery of healthcare; health expenditures; social determinants of health; resource allocation

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