

Executive Overview

Background

- America has the highest rate of preference-sensitive surgery in the world, yet we are no healthier than people in countries with substantially lower rates of surgery.
- More than 25% of these procedures, on average, occur in cases where the known risks to the patient exceed the potential benefits.
- The vast majority of these procedures, some 75%, occur in non-emergency circumstances.
- Approximately 8% of all surgical costs are due to surgical complications, errors and hospital-borne infections, many of which are avoidable.
- Costs associated with preference-sensitive surgery represent 25-40% of total health care spending. These comprise the largest, single unmanaged variable in the US commercial health care cost equation.
- There is a shift in utilization to more complex and costly procedures, without evidence of improved health or outcomes.
- Health services research consistently supports the fact that surgery candidates, when presented with well-designed decision support aids, make far more conservative decisions than their health care providers, with no resulting harm to health status.

Welvie Overview

Welvie has developed a surgical Decision Support Program to help participants understand and navigate the entire surgery process. This six step curriculum teaches individuals how to initiate a Shared Decision Making (SDM) process. The **Welvie Decision Engine** ™ achieves this by educating them on how to communicate more effectively with their physician to ensure an accurate diagnosis. The Program also helps them understand all available treatment options, along with the known risks and potential benefits of each, to help them decide on their best course of action. If surgery is selected, then Welvie's curriculum helps the participant understand how to prepare for and optimize the surgery thereby minimizing errors, complications and infections. Welvie does not diagnose or recommend a particular course of treatment over another. The Program is designed to teach the participant how to work better with their physicians by giving them the skills and knowledge to engage their doctor is a meaningful discussion about their choices for care. The clinical content related to treatment options and alternatives in the Welvie curriculum goes through an iterative editorial process. This process includes extensive research from multiple sources (including peer-review journals, government institutions, and the clinical guidelines published by national organizations), multiple reviews by board certified physicians and patient input. The process is tailored to achieve a conversational tone and to make complex information understandable to the participant.

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To effectively deploy the Program, Welvie has created three distinct "Engines" which when used together can effectively create better outcomes and save money. They are -

- The Welvie Decision Engine ™ is the consumer facing, interactive curriculum described above.
- The Welvie Analytics Engine™ is used to benchmark surgical utilization, measure ongoing and year-overyear financial success and identify individuals who are on a likely path to surgery.
- The Welvie Outreach Engine™ uses an innovative communication campaign to engage those individuals found to be on the path to surgery and create general awareness of the Welvie Decision Engine ™ through direct outreach to the entire population. Through population and targeted outreach, Welvie successfully engages 4 6% of members annually to utilize the Decision Engine.

In the commercial and Medicare Advantage arenas, Welvie has deployed its Program with health plans and managed care organizations such as Anthem, Arkansas BCBS, BCBS Kansas City, BCBS of MI, BCBS TN, BS of CA, CMS/Medicare, Health Net, CalPERS, WellCare and Humana. Over 20 million members have had access to the Welvie Program.

Welvie Program Objectives

Welvie's approach to management of preference sensitive surgery (PSS) is highly intentional and designed to reduce claims cost by:

Optimizing Necessary Surgeries – Use of a surgical risk-management shared decision-making program insures surgical candidates make the best individual surgery decision with awareness of surgical complexity/risks and all treatment alternatives available. Armed with this knowledge, consumers can prevent a number of life threatening complications and errors.

Preventing unnecessary surgeries – Provided with all their options and weighing the risks and benefits of each, 1 in 4 consumers will either determine an elective surgery is not necessary or elect a less aggressive surgical, medical, pharmaceutical or therapeutic alternative.

Welvie Participant Feedback

"I had surgery the previous August and wish this would have been available to me. I would have done some things differently."

"This is an extremely helpful tool - I really liked being able to print off all the questions to ask and have a reviewable printed sheet to keep."

"I am not having surgery now, but have had surgery in the past and believe this would have helped in recovering. Some doctors I had did not answer questions I had to my satisfaction."

"I was not aware of the other options that were available."

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3 Year Randomized Control Trial -Centers for Medicare and Medicaid Services

In 2012, Welvie received federal funding from the Center for Medicare and Medicaid Innovation (CMMI) to conduct a three-year randomized control trial (RCT) of the Welvie SDM program designed to lower rates of surgery, reduce medical costs and enhance members' care experience. With over 17,000 participants, Welvie demonstrated an 8 to 1 return on the grant award. The RCT, the largest in existence, was designed to address each element of the Three-Part Aim. The high level, third party CMS analytics included¹:

1. Improving the experience of care

- 93% of participants report being better prepared to speak with their physician about their health
- 99% of participants report Welvie helped them understand how to prepare for surgery

2. Improving the health of populations

- Mortality Rates Within the Welvie Intervention Cohort: 21 Fewer Deaths Per 1000 Patients
- Decrease in Surgery Readmissions: 103 Per 1000 Patients
- Decrease in ER Admissions: 8 Per 1000 Patients

3. Reducing per capita costs of health care

- Decrease in Total Medical Expenditures: \$13.83 Savings PMPM
- Decrease in Surgery Expenditures: \$7.89 Savings PMPM
- Decrease in Outpatient non-ER Expenditures: \$3.18 PMPM
- Decrease in Hospital Days: 28 per 1000 Patients

¹ Source: Centers for Medicare & Medicaid Services # 1C1CMS330984

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