

# Engagement, an Old Concept, Has a Big Impact on Unwarranted Variability and Healing

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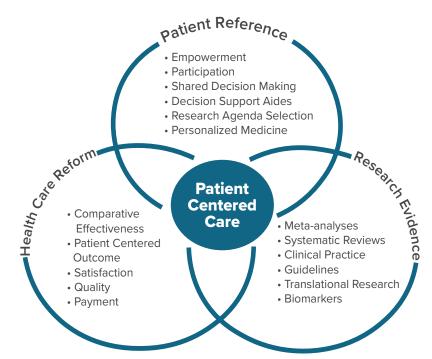
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As part of our ongoing research aimed at minimizing unwarranted clinical variability and improving healing rates, we have already reported on visit frequency and the impact of wounds that fail to heal on a normal trajectory. In this report, we describe the impact on healing when patients either cancel visits, or completely quit their treatment plan. It should seem obvious that inconsistent care would result in less favorable outcomes, but we need to look in the mirror when trying to assign the reasons for patients canceling and quitting treatment. Certainly there are situations in which logistics, insurance/co-pay, life events and uncontrollable social situations result in patients having to make health and personal decisions, placing their healthcare on hold. Attributing high cancellation rates to these issues is, however, an easier pill to swallow then looking at our own practice pattern, patient relationship and experience, clinical throughput and outcomes to ensure we are doing all that we can as providers and wound care teams to mitigate against things under our control.

#### **ENGAGEMENT THROUGH PATIENT-CENTERED TREATMENT**

As the healthcare system began to recognize that a fee for service model of care failed to deliver optimal results in many instances, value-based care models began to emerge<sup>1</sup>. The Affordable Care Act (ACA) included funds to create the Patient-Centered Outcomes Research Institute (PCORI), which issued grants for providers and institutions to study the impact of patient preferences on health outcomes<sup>2</sup>. In the wound care community, the concept of patient preference was a central theme in a publication by Corbett and Ennis<sup>3</sup>. The paper described a patient-centered framework, depicted below in Figure 1. This visually describes the overlapping concepts of healthcare reform, evidenced-based care and patient preferences. It is imperative that we find the right balance between these paradigms in order to maximize outcomes, which, at times, is a difficult task. At the time of this publication, the field of oncology was leading the charge in regards to obtaining patient input, not only for the goals of care, but their preferences for quality of life/treatment trade-offs<sup>4</sup>.

**Figure 1.** Image from Corbett and Ennis<sup>3</sup>.



Further work on trying to understanding the patient perspective was conducted by the American College of Wound Healing and Tissue Repair in collaboration with the Angiogenesis Foundation<sup>5</sup>. A full-day working session brought together payers, researchers and providers, along with patients and their caregivers. This professionally moderated program generated a white paper that was widely distributed and led to some key takeaway messages, as summarized in Figure 2.

Figure 2. Images from the 2013 Patient-Centered Outcomes in Wound Care paper<sup>5</sup>.

### **Patient-Centered Outcomes in Wound Care**

**Published by** the American College of Wound Healing and Tissue Repair and the Angiogenesis Foundation

Importance to Patients	Clinical Importance	Knowledge Gaps
<ul> <li>Wound recurrence</li> <li>Quality of treatment for wound care</li> <li>Independent living</li> <li>Personal interactions with doctors and health care professionals</li> <li>Living a normal life</li> <li>Receiving proper skilled care for wound healing</li> </ul>	<ul> <li>Mental health issues, specifically depression</li> <li>Wound recurrence</li> <li>Better communication among health care professionals</li> <li>Prevention of preventable wounds</li> <li>The unresolved question of whether the goal should be to heal all wounds</li> <li>Pain</li> <li>Mutual education between doctor and patient</li> </ul>	<ul> <li>Quality of treatment</li> <li>The question of whether the goal should be to heal all wounds</li> <li>How to prevent preventable wounds</li> <li>How to create clarity for the patient concerning who is providing treatment</li> <li>Providing skilled training for wound care</li> <li>The factors that influence durability of closure, time to closure, and the cost of closure</li> </ul>

More recently, the concept of patient engagement is undergoing a transition towards a "person-centered" approach<sup>6</sup>. This newer concept is in alignment with Healogics' people-first, patient-centered initiative. The patient-centered model implies an asymmetric relationship between an "expert" (provider) and a "layperson" (patient). Patients spend most of their time in their own social context and have to find a balance between that world and the new healthcare requirements that come with becoming a patient. Therefore, providers need to think about the proposed treatment plans and expectations and try to consider the context in which the patient lives. Try to set aside some time at each visit to emphasize the importance of a proposed treatment, the current status of healing progress, the impact of their care on family and friends and the importance of achieving healing in a timely fashion to minimize complications. Helping the patient see a future state of having a healed wound and returning to a normal life needs to be balanced with discussions about recidivism and actions-or behaviors that will need to become part of their new "normal" in order to alleviate wound recurrence.

### **VISIT CANCELLATIONS AS A MEASUREMENT OF NON-ENGAGEMENT**

To better understand the impact of patient engagement on our patients' outcomes, Healogics examined the impact of visit cancellation on treatment completion and wound healing using our own real-world data. As was the case with our two prior white papers in this series, all data presented below is based on wounds discharged in 2019, limited to the outpatient service line and Wound Care Centers® that offer full wound care services. Consults and wounds assessed only once are also excluded.

Our research found that a substantial amount of patients (43%) who did not complete their treatment quit by choice (Figure 3). This number does not include those who quit for financial reasons or those who moved. While it may be difficult to prevent those leaving treatment because they were medically transferred to the inpatient hospital or were discharged for other reasons, there are still at least two in every five patients that can potentially be converted to completing their treatment by increasing their engagement with the Center and their treatment plan.

Figure 3. Percent of patients who did not complete treatment by their discharge outcome.

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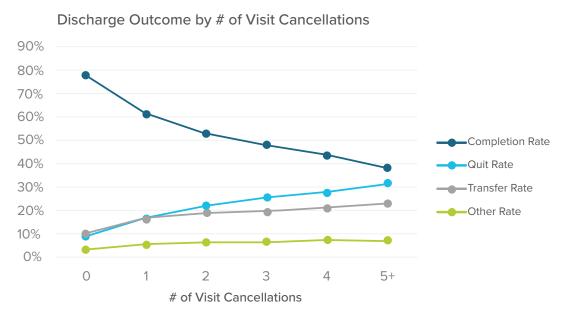
### % of Patients Not Completing Treatment

Cancellations may be an early indicator of someone who is at risk to not complete treatment. As seen in Figure 4, patients who quit have almost a three times higher average cancellation rate (17%) than those who complete (6%). Additionally, as the number of canceled visits increases, the percent of patients completing treatment decreases while the percent who quit increases (Figure 5).

**Figure 4.** Cancellation rate by discharge outcome and correlations between Center.

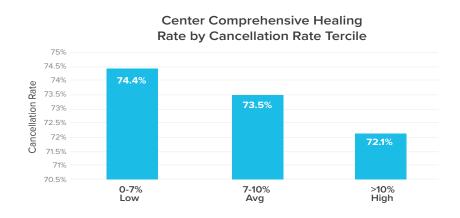
Discharge Outcome	Cancellation Rate	
Completed	6%	
Quit	17%	
Transfer	12%	

**Figure 5.** Discharge outcome by number of canceled visits during admission.



Similarly, when looking at the data at the Wound Care Center level, we found that Centers with higher cancellation rates have lower overall Comprehensive Healing Rates (CHR) (Figure 6) and higher quit rates.

Figure 6. Average Comprehensive Healing Rates by cancel rate ranking groups (terciles).



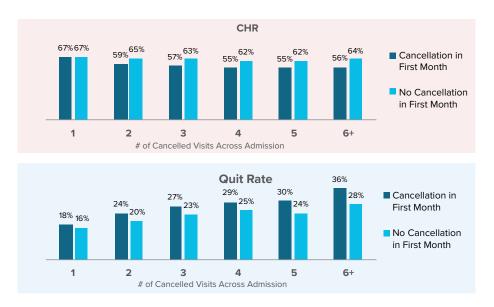
We also found that as a patient's acuity increases (defined by the number and complexity of their wounds), so does their cancellation and quit rates, leading to the lowest healing rates in the highest acuity group (Figure 7). These more difficult cases, who often are in treatment longer than lower acuity patients, may need different engagement strategies to ensure they complete treatment and heal all of their wounds.

Figure 7. Cancellation, quit and healing rates by patient acuity.

Patient Acuity	Cancellation Rate	Quit Rate	Overall CHR of all Wounds
Low	7%	11%	77%
Average	9%	15%	73%
High	11%	21%	54%

An additional interesting finding is that cancellations early in the treatment program translate into a higher chance that the patient will ultimately not complete their treatment (Figure 8). This finding emphasizes the importance of engagement of the patient right from the very start of their care. In order for treatment to be successful, providers should make patients an active member of the treatment team and have ongoing discussions on the treatment plan, anticipated time to heal and any clinical, social or psychological impacts the treatment process may have on the patients' lives. Both patients and providers need to be aware of the important role the patient plays in their own care and wound healing.

**Figure 8.** Comprehensive Healing Rates and quit rates by total number of canceled visits and whether there was a cancellation in the first month of treatment.



### **SUMMARY AND CONCLUSION**

Maintaining patient engagement and reducing cancellations and quit rates is an important lever for improving Comprehensive Healing Rates and reducing unwarranted clinical variability across our Wound Care Centers. Our findings show that cancellations can disrupt a patient's healing progress and reduce the patient's engagement in treatment, leading to quitting treatment prematurely and preventing them from healing. Patients who discontinue treatment by choice make up a large portion (43%) of those who do not complete treatment. Those who eventually quit have an average cancellation rate almost three times higher than those who complete treatment (17% vs 6%, respectively). Canceling early in treatment (during the first month) appears to be an early indicator of quitting later in treatment. These findings tie into our previous internal research of visit frequency and stalled wounds. Patients with poor engagement are likely to have inconsistent visit frequency resulting in their wound healing trajectory to stall, making them more

likely to quit treatment than those who do not stall. Allowing patients to be active and valued members of the treatment team from the first day of treatment may help keep the patient engaged in the treatment process and prevent them from quitting prematurely. This is especially important in higher acuity patients that often have multiple wounds and spend a longer time in treatment.

Patient engagement has evolved over time in parallel with healthcare changes, which emphasize value-based outcomes. Providers have proven that patient engagement, which includes patient-centered care and shared decision making, improves clinical outcomes, raises patient satisfaction, decreases total cost of care, fewer adverse events and treatment adherence.[7-10] As these concepts have evolved, the field has migrated to a "person-centered" approach. This reflects the dual role that a person has to balance when they become a patient. The impact we have on our patients affects both their social world and the clinical episode. Wound care provides a unique clinical setting where we can greatly impact a person's life. We are lucky to be able to see the patients frequently over a fairly long period of time, and providers comment on the strength of the bonds that they form. Using empathy, compassion and respect while building trust will improve our patients' experience and help them become engaged members of the treatment team. Our data proves that their chances of healing depend on it.

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