Cancer care today is at the forefront of integrating diagnostic and treatment breakthroughs, helping patients survive even the most serious diagnoses for longer periods. With this success comes a host of new needs, mainly in the form of quality and capacity. Timely, affordable, quality care is the great challenge ahead. If this challenge is to be adequately met, regional oncology treatment centers need to play a greater role than ever. A look at how they can ‘Future Ready’ themselves.

The last four decades have seen survival rates for most major cancers markedly improve even as incidence rates have climbed. Such progress is widely attributed to an increased focus on early detection and intervention particularly with cancers deemed highly “curable” if detected early. This undoubtedly extends survival windows (and opens a pertinent discussion on the treatment capacity of oncology care providers). Also, many more end-stage cancers today are being rendered manageable for years or decades, where previous generations of patients with similar diagnoses were given significantly shorter prognoses. A high-quality cancer care center close to home will be the search for many.

That brings us to the principal Future Readiness challenge in American oncological care: redesigning regional facilities so that they can address capacity constraints. Only with such redesign can the right treatment reach the right patient at the right time. Regional centers are (and will remain) main gateways for initial assessment and care. But as more people seek proper screening and care earlier, these centers must build capacity to provide timely diagnosis and treatment of a greater volume of patients.

**Fighting the patient’s war**

A patient’s treatment path is punctuated with waits. Wait to learn “if” they have cancer. Wait to learn “what kind.” Wait for a consultation on how to treat it. Wait for second opinions. Wait to find out how long they will have to wait before they can begin their treatments, begin to fight back. If we are, indeed, at war with cancer, regional centers will need to look at these “waits” as true access opportunities – as opportunities to bring the patient to their physician strategists and nurse tacticians. Better managing the flow of individual treatment even as quality care is provided to each patient can pay significant dividends. In time, it frees up additional capacity to consistently provide the same level of high-quality care to more patients without having to expand treatment hours, staff or facilities.

Being unable to provide timely care to cancer patients can be disconcerting to any oncologist, knowing a patient may wait more than 14 days to see him/her. The provider team at Hematology Oncology Medical Specialists (Lancaster General Medical Group) faced this reality and knew that improvement
was needed. In addition, an expansion of services through the development of a state-of-the-art cancer center was being planned for the local community.

Executive leadership of the Lancaster General Health (LGH) system understood that improving efficiencies within this practice would need to occur prior to the expansion of services in the new cancer center as well as to a planned implementation of the electronic medical record in the office. To avoid the fate of automating sub-optimal processes, one must take a hard look at the current state to understand what truly impedes workflow. This scrutiny could open the door to greater access in many small ways, and in few larger ways that eventually yield a substantial boost in capacity. Resulting process improvements, combined with next generation technology, was required and LGH partnered with Genpact to provide both education and mentoring through the use of LEAN Six Sigma improvement methodology to achieve this goal.

Fighting this war on cancer requires a capable team, and assigning the appropriate roles and responsibilities for each member of that team is essential for success. Take the task of educating patients about their chemo regimen. Redesignating that task to licensed physician assistants freed up block time for our physicians, and added potential capacity for 84 new patients appointments annually.

A close look at the administrative processes physicians must manage revealed two improvement opportunities. The first involved reducing time they spent looking for forms by using a Lean Six Sigma 5 S tool, to eliminate all but essential paperwork, and then assure a standardized location for easy retrieval. The second involved recognition that 75 percent of the “required” documentation on forms need not be done by the physicians themselves. A detailed analysis of this paperwork process, followed up with some common sense procedural changes, immediately reduced the number of these forms processed by physicians from five each day to one per week. Seemingly small things are easy to miss without an active commitment to evaluating each work stream – yet can have a negative impact. Something as insignificant as when insurance copays were solicited on the day new patients arrived for their initial consult can make a difference in how patients view their experience. Through observation of the process, it was discovered that the well-meaning clerical staff often skipped asking a visibly distraught patient for the required copay in person, instead utilizing the mail system to solicit, delaying the collection for weeks. This left patients and caregivers to handle the matter on their own from home while facing a mailbox bulging with other treatment related bills and paperwork. Moving the collection of copays to the registration staff at the time of the patient’s arrival to the office, prior to interacting with the physician, resulted in a 60 percent improvement in collections, as well as removing “bottlenecks” in the already burdensome check out process by 13 percent (See Case 1).

Much capacity is also freed up when the waste of “travel” is reduced. In the laboratory, simply relocating supplies at the specimen-receiving station allowed staff a travel-reduction of 180 steps a day. In the chemotherapy infusion center, travel waste occurred in the form of a floor plan that did not support visibility of the patient’s arrival to the busy nursing staff. Each nurse walked 1200 steps per day, on average. Couple that with the lack of a solid communication structure, and the amount of foot travel significantly increased non-value added activity, particularly for the unit facilitator who was already walking nearly 3000 steps per day. Combining process mapping to visualize barriers improved use of scheduling software and

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### Patient Centered Care In-Action

**Case 1: A better way to collect copays**

1. Three-minute collection process is moved from checkout to check-in
2. Shorter checkouts free up 13% more capacity for processing departees
3. More (exhausted) patients now able to go home sooner after care completes
4. Time-of-visit payments rise 60% with switch to requesting copay at check-in
5. Post-visit collections avoided, sparing patients “surprise” bill weeks after fact

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### Patient Centered Care In-Action

**Case 2: Infusion order completeness**

Increasing completeness from 13% to 80% reduces time spent clarifying orders, directly impacting involved physician’s availability for patient care while also improving pharmacy productivity
S tools. This allowed for a 66 percent reduction of walking by nursing staff, improved utilization of the documentation area by 40 percent, and yielded a 30 percent reduction of non-value added time spent searching for charts and supplies.

Significant opportunities existed as well in areas that involved rework. Consider the infusion order, a critical component in Oncology treatment work streams. Not surprisingly, these orders are among the most complicated, potentially-lethal medication order sets required for patient therapy. In addition, transmission of these orders to the compounding pharmacy introduces the potential for increasing points of error. Integrating the need for customization of each order based on individual laboratory values often creates a confusing process for the patients too. Building redundancy into the process has often been utilized as a patient safety maneuver, in spite of affecting both physician efficiency and pharmacy productivity. By standardizing use of “critical-to-completeness” protocols that could be quickly implemented and easily followed, our order completeness rose from 13 percent to over 80 percent at first pass, while the required touch points for each order fell by 46 percent.

Our efforts in this area improved practice as the cancellation-block refill rate rose to 75 percent.

A difficult decision for providers involved changing strategy regarding the inpatient daily-rounding process. Our current observations and data confirmed the fact that each physician – rounding to their own attributed patients every day – resulted in reduced availability for office patients. Clearly laying out a single dedicated rounder structure solved for this logistical risk and resulted in consistent treatment for the inpatient population as well as improved access for new patients requiring oncological treatment.

**What we must never forget**

The dual quest for capacity and quality begins and ends with the rigorous pursuit of more efficient and effective patient-centered care. Cancer patients are fighting a near constant battle with fear and treatment-induced fatigue. It is not enough to simply treat their disease. How we treat the person burdened with that disease matters just as much.

"Cancer patients are fighting a near constant battle with fear and treatment-induced fatigue. It’s not enough to simply treat their disease. How we treat the person burdened with that disease matters just as much."

Although it seems obvious that a “busy” practice and a “much needed” service would result in very few open slots, this was far from the true picture in this oncology practice. A patient’s diagnostic and treatment course is at the mercy of many variables beyond their control, often forcing last minute cancellations with a starting refill rate of 5 percent. In conducting a Lean Evaluation of the process, Genpact Six Sigma Blackbelts and LGH staff together developed a multi-pronged approach. It included visual management to track cancellations and the creation of a standard process utilizing existing technology to refill potential slots. Enhanced timely communication to the physician providers was also critical.

This forms the basis of the “patient centered care” treatment concept at the new Ann B. Barshinger Cancer Institute located on the grounds of the Lancaster General Health Pavilion. The Cancer Institute aims to arrange treating providers so that debilitated patients are largely anchored in one place. That way, care providers can go to the patient, instead of the reverse. The precepts of Lean Six Sigma (LSS) process reengineering require a consistent drive to remove non-value adding activity, evaluating workflows that directly or indirectly impact quality of care, and its cost – both financial and emotional – to patients. Transformation is a journey, not a destination, and ongoing efficiency-improvement efforts will be the key to meeting tomorrow’s cancer care challenge today.
About Genpact

Genpact Limited (NYSE: G), a global leader in business process management and technology services, leverages the power of smarter processes, smarter analytics and smarter technology to help its clients drive intelligence across the enterprise. Genpact’s Smart Enterprise Processes (SEPSM) framework, its unique science of process combined with deep domain expertise in multiple industry verticals, leads to superior business outcomes. Genpact’s Smart Decision Services deliver valuable business insights to its clients through targeted analytics, reengineering expertise, and advanced risk management. Making technology more intelligent by embedding it with process and data insights, Genpact also offers a wide variety of technology solutions for better business outcomes.

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Bala Verma and Raj Matthew have led several hospital-based healthcare process-improvement initiatives across the US in their Genpact Reengineering roles, including their latest work assisting professionals at Lancaster General Health. LGH’s Chief Quality Officer, Norma Ferdinand, together with Dr. Elizabeth Horenkamp, Managing Physician of Hematology Oncology Medical Specialists, have been active proponents of Lean Six Sigma methodologies as part of their push to bring “patient-centered care” to the 623-licensed bed not-for-profit health system located in Central Pennsylvania.

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