A hand is holding a black clapperboard with white diagonal stripes on the top edge. The clapperboard is tilted and held against a solid blue background. The text on the clapperboard is white and reads: "Drug-Specific Videos for Patient Chemotherapy Education".

Drug-Specific Videos
for Patient
Chemotherapy
Education



Consistency can be a major challenge when delivering healthcare across a wide geographic area. Nearly one of every four newly diagnosed cancer patients living in Wisconsin receives cancer care at Aurora Health Care, a vertically integrated health system covering most of eastern Wisconsin. In 2016 Aurora's oncology clinics (i.e., Aurora Cancer Care) saw nearly 8,000 newly diagnosed patients, with about 40 percent beginning medical oncology treatment. Altogether, Aurora Cancer Care initiates nearly 5,500 chemotherapy plans each year. The need for consistent patient education across multiple integrated sites prompted Aurora Cancer Care to develop a series of more than 125 educational videos.

Aurora Cancer Care has 19 medical oncology and 11 radiation oncology treatment locations, with more than 150 oncology physicians, including 38 medical oncologists, 14 radiation oncologists, and more than 100 surgeons in multiple disciplines who perform cancer operations. We have more than 180 active cancer clinical trials and, as a National Cancer Institute Community Oncology Research Program site, strongly encourage our patients to participate whenever a clinical trial is available. Our clinic sites range from as small as two medical oncologists and support staff to more than 10 medical oncology providers at one site. There are more than 125 oncology-certified nurses and 22 oncology pharmacists delivering care throughout the system.

Bottom line: Aurora Cancer Care has an array of oncology caregivers providing information to—and answering questions from—thousands of patients and caregivers. Long, written descriptions of chemotherapy and its side effects, particularly when prescribing multiple drugs, are often ignored by patients who are overwhelmed by their cancer diagnosis and treatment. Verbal patient education has its own challenges; even when scripted, education sessions with nurses vary substantially. Particularly in smaller cancer centers with fewer staff, the likelihood of the educator being disturbed or interrupted is greater, creating poten-

From the perspective of the patients, it was clear that all patients needed basic information regarding chemotherapy, including how to react to different situations while on chemotherapy and specifics about the drugs they were going to receive.

tial gaps in teaching. Despite good intentions, some caregivers present the information better than others. At Aurora Cancer Care, we wanted to be sure that patients received consistent, quality teaching.¹⁻⁵

Need for Better Chemotherapy Education

Before moving forward with this project, we reviewed the needs through the lenses of the patient, the caregivers, and the institution. From the perspective of the patients, it was clear that all patients needed basic information regarding chemotherapy, including how to react to different situations while on chemotherapy and specifics about the drugs they were going to receive. Most drugs are given in combination with other agents, and these combinations can change frequently. Most patients noted that they had family members who wanted to know specifics about their treatment and wanted to be able to provide this information without bothering their physicians. Because Aurora Cancer Care covers such a wide geographic expanse, caregiver experience varies widely and, even if scripted, we had concerns about the consistency of

the education being given. Additionally, it is always possible that a nurse or pharmacist could be pulled away during the teaching so that the session might not be fully delivered without interruption. Finally, patients liked the opportunity to have one-on-one time with their nurses, and staff appreciated the chance to spend time prior to treatment with their patients. With these principles in mind, we believed that several critical points needed to be considered when evaluating patient chemotherapy education:

1. All patients needed basic information regarding chemotherapy in general.
2. Most drugs are now given in combination with others.
3. Patients would like to be able to share their educational information with their families.
4. Patient education by nursing can be quite variable, even if scripted, and is subject to interruption.
5. Patients appreciate interaction with their nurses to be sure that they understand information and instructions.

In addition to the chemotherapy-specific videos, another goal was to educate patients about when to call for help. We felt that this would not only help allay some of our patients' fears but also help us reduce unanticipated trips to emergency departments (EDs) across the system. We asked one of our senior medical oncologists to participate in this video, entitled *Cancer S.O.S.*, and he graciously accepted.

Our nurses and pharmacists report an average of 30 minutes saved per patient, which potentially results in a week of saved nursing time for each 80 patients started on chemotherapy.

Engaging Staff and Patients

Before embarking on this project, we considered other, less time-consuming options of providing consistent patient education. We looked at many of the commercially available chemotherapy videos but found that none were flexible enough to meet our specific needs. Most available videos were more general in nature, did not readily explain the combinations of drugs to be offered to patients, and did not cover many of the drugs that we are using at Aurora Cancer Care.

We also had access to the VIA Oncology patient education documents (viaoncology.com). Although this information was quite useful for patients on multiple drugs, a significant amount of reading was required. Producing our own videos in-house allowed us to define the content and tailor it to the needs of our patients. It also gave us the chance to showcase Aurora Cancer Care staff from across the system. By creating our own videos, we could combine presentations on different drugs for frequently changing chemotherapy combinations and replace information

as new indications or side effects were reported. By incorporating the videos into our patient portal, patients could share the videos with family members. This arrangement facilitated important interaction with staff and patients.

When we discussed the project with our staff, they were very excited about participating in this project and thought that the opportunity to draw from staff from across the system would be particularly rewarding and engaging. Staff wanted to be sure, however, that the videos were based on their expertise and that they would still have time committed to answering questions after patients had watched the videos to ensure that the patients understood the information presented. Our staff felt strongly that an informed patient would have less anxiety and tolerate therapy better than an uninformed patient, as previously described by Garcia.⁶

Before creating the videos, we also queried patients about their interest. We learned that patients wanted information about the drugs, potential side effects of the drugs, and what to do if they had a problem. Patients liked the idea of a video if it was concise and could be shared with family, friends, and caregivers. Patients also wanted paper documentation for long-term reference and were clear that they wanted the ability to ask questions of cancer program staff.

Video Implementation

When starting this process, we felt that general background information would help patients with their overall understanding of the therapy they had been prescribed. In addition to the specifics of the drugs the patients would be receiving, a video was prepared by one of our senior oncologists. There were several important goals for this video:

- Patients needed general information about chemotherapy, including information about types of delivery (e.g., oral, IV, access)
- Patients needed a clear understanding of typical issues and when to call for help. This education was necessary to help patients avoid unnecessary trips to the ED, which could easily result in exposure to contagious illness and unnecessary admissions to the hospital.

Because of the large number of drugs that are currently available by parenteral and oral routes, we asked both our oncology-certified nurses and our fellowship-trained oncology pharmacists to participate in making the videos. Because pharmacists already counsel patients when they fill prescriptions, we believed that pharmacists would be particularly adept at providing education about oral drugs. We also thought that because both nurses and pharmacists played important roles in patient education, the different perspectives would be extremely valuable for this educational process.

At the time the project was conceived, Aurora Cancer Care had a complete video production operation that allowed us to conveniently record the videos at multiple locations. Our oncology clinical nurse specialist oversaw this project from conception to completion and took charge of scripting, recording, and editing


the videos. Videotaping was arranged by scheduling multiple sessions at different oncology sites throughout the system. Once complete, videos were saved as MP3 files and incorporated into our patient-accessed portal using the EMMI platform (emmisolutions.com). Figure 1, right, shows the number of videos distributed to patients in a one-year period.

Positive Results

With this platform, we have seen a sustained rise in the use of the videos by our patients, with monthly tracking as shown in Figure 2, right. When patients start the videos, they are played until completion 83 to 89 percent of the time. When patients are sent the videos in advance of their visits using a video link sent through the patient portal, they are viewed almost 60 percent of the time.

Now that this program has been available for more than a year, we have received positive feedback from patients and families. The videos have improved patient and staff engagement and have also helped the service line with Quality Oncology Practice Initiative documentation, quality control, and consistency across offices of different sizes and with different levels of experience.

As we move toward value-based care, savings in both healthcare costs and staff time become increasingly important. Our nurses and pharmacists report an average of 30 minutes saved per patient, which potentially results in a week of saved nursing time for each 80 patients started on chemotherapy. Taken to the maximal degree, with 5,500 patients started on chemotherapy each year, this could result in more than 68 weeks of saved nursing labor in a year—an invaluable benefit.

The development of chemotherapy educational videos proved to be a rewarding endeavor for our large, integrated health system. It allowed us to standardize the teaching across a wide geography, improved patient and staff engagement, has the potential to reduce readmissions and trips to the ED, and may result in significant return of productive nursing time. 

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Figure 1. Number of Videos Distributed to Patients

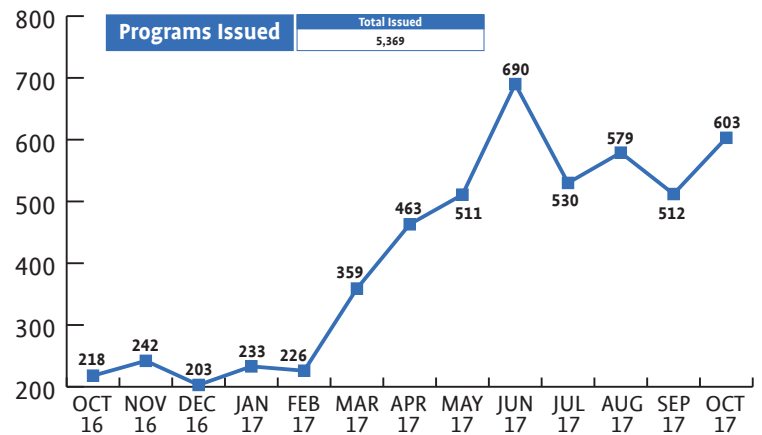
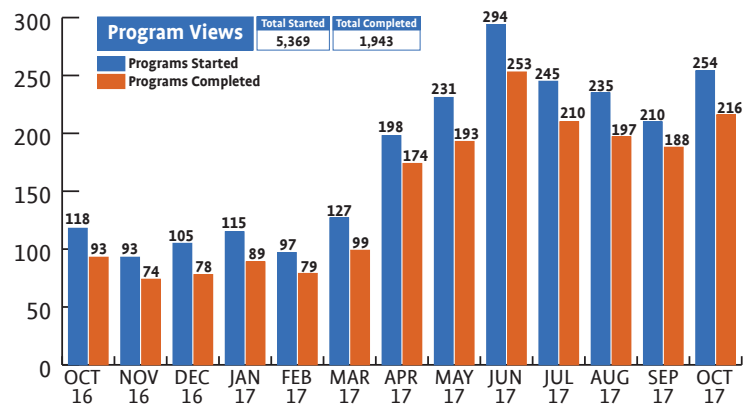


Figure 2. Number of Starts and Videos Completed



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