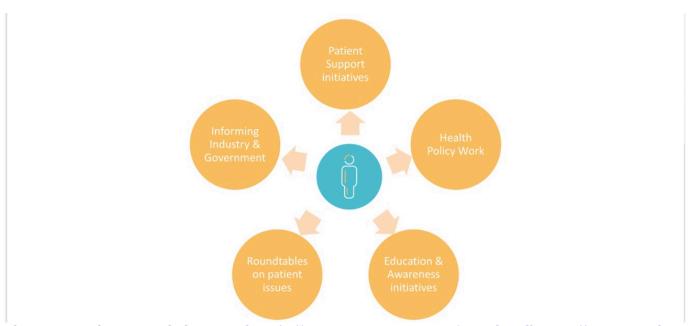
Cancerworld

Examples of efficiency in cancer care from the All.Can efficiency Hub - Part 1

Adriana Albini / 24 November 2021



The SPCC Webinar entitled "Examples of efficiency in cancer care from the All.Can efficiency Hub – Part 1" was held on October 25, 2021.

All.Can's efficiency hub aims to collect as many examples as possible on how to improve efficiency in cancer care, to make them readily accessible, and to encourage others to replicate them. This session, which focussed on some of these examples, was conducted by Stefan Gijssels. Mr. Gijssels is co-founder and Chair of the Patient Expert Center (PEC) in Belgium, which trains members of patient organisations to become patient experts in their disease area. He is also co-founder of Digestive Cancers Europe, the European umbrella organisation of a large group of national members representing patients with digestive cancer. Mr Gijssels is himself a metastatic colorectal cancer survivor.

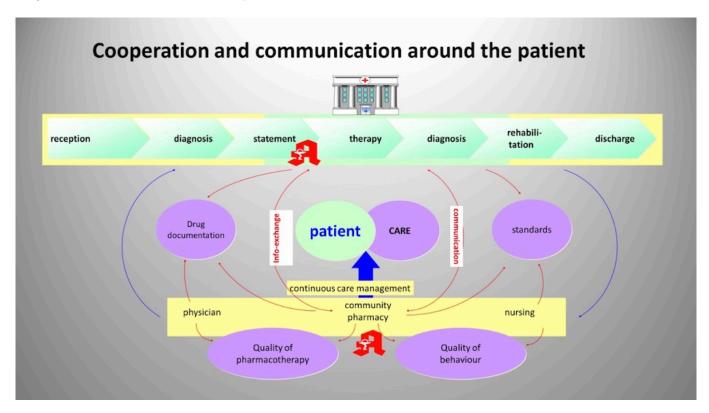
The first speaker, Dr. Klaus Meier, is president of the European Society of Oncology Pharmacy (ESOP) and of Deutsche Gesellschaft für Onkologische Pharmazie (DGOP). He is an active member of the board of European Cancer Organisation, and editor in chief of the "European Journal of Oncology Pharmacy."

Example 1: Improving efficiency by empowering pharmacists (EPIC project)

The aim of the European Society for Oncology Pharmacy is to support optimal treatment for cancer patients. To do that, it must assess the situation as it stands, and then look at what kind of measures

it can take. Article 1 of the European Cancer Patient's Bill of Rights, launched in 2014, declares "the right of every European citizen to receive the most accurate information and to be proactively involved in his/her care." This, of course, should apply to the whole world, not just Europe, but it has been formalised by the Parliament and it gives the stakeholders working in healthcare a direction on what needs to be done. The patient should always be at the centre of care, but what is around the patient? Sometimes there is hospital treatment, but mostly we survive outside the hospital. The average life expectancy for humans is about 78 years. This means that we are not in hospital for roughly 77 years, practically our whole life from beginning to end, minus perhaps three to four months.

After cancer treatment, survivors will likely be dealing with a chronic condition, for which they need to receive explanation and support from those who have the time to do that, and that is generally the community pharmacist. If we look at the development of cancer drugs in the past twenty years, we see a definite increase in the number of drugs to be given orally. Certainly in Europe, oral anticancer drugs have been mostly delivered by community pharmacists, rather than specialised hospitals. We often hear complaints that pharmacists do not educate patients enough on the effects of a drug that is a hundred years-old, like aspirin. But it is also crucial that they have knowledge of drugs that have only been on the market for a couple of weeks.

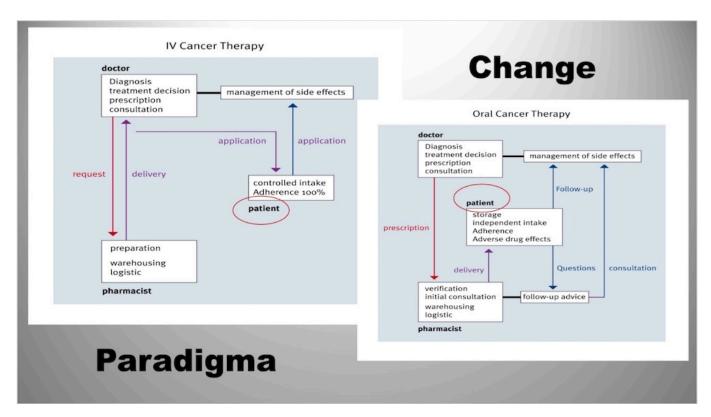


Why be concerned about safe handling of oral chemotherapy agents?

Oral chemotherapy administered at home or in assisted living facilities is often dispensed or administered without proper safeguards. Current guidelines for oral therapy in non-traditional settings are not as well defined as they are for intravenous therapy. Many people have limited experience and education in the use of oral chemotherapy agents, not just patients and caregivers but some healthcare professionals as well, including pharmacists. Also, the potential for deviation from regimen is great because under-adherence (taking too little) or over-adherence (taking too much, self-medicating) can occur. To give a couple of examples of things to look out for, Erlotinib can cost about €3-4,000 a month, but a smoker reaps only one third of the benefits, as cigarette smoking can massively reduce Erlotinib exposure. At the other end of the spectrum, when Nilotinib is taken together with grapefruit juice, the concentration of the drug increases and can lead to unexpected side effects.

What characterises the ideal patient for oral chemotherapy?

First and foremost, the patient must have the willingness and ability to adhere to the treatment regimen; they must be able to communicate their concerns and reactions; to understand the importance of the therapy in the context of the disease, and the importance of safe handling; they should also know how to manage the potential side effects of treatment. But the other crucial factor is the ability to swallow pills. Often these tend to be very sizeable, and patients who cannot even swallow small tablets face a real difficulty. Once the problem of size is overcome, the next major issue is non-adherence. Many papers have been published on the consequences of non-adherence or of poor adherence, for example a study in the American Journal of Haematology, shows how non-adherence to Imatinib adversely affects event free survival in chronic myeloid leukaemia. This is a clear indication that the paradigm needs to be changed. With IV cancer therapy, the doctor prescribes, the pharmacist takes the request and delivers the infusion to the doctor or directly to the ward. The drug is then administered to the patient by port or other ways. Adherence, therefore, is one hundred percent. With oral therapy, the patient gets the prescription, goes to the pharmacist, the pharmacist delivers. The patient takes the drug home, and then we don't know if they will take it in line with the instructions received from their healthcare team.



The EPIC Project

Many oral anticancer drugs are approved by the MEA or the FDA each year, and the often-complex treatment of oncology patients is moving from a supervised healthcare setting to the patient's home. The success of cancer therapy is closely linked to the patients taking their medication exactly as directed. Oral anticancer drugs are generally dispensed in community pharmacies, but an online survey of European pharmacists revealed that their knowledge of oral anticancer agents and confidence in pharmaceutical counselling was low. Pharmacists have an important role to play in reducing non-adherence, but if they lack the necessary knowledge, how can the patient learn? To this end ESOP launched the Empowering Pharmacists to Improve Healthcare for Oral Chemotherapy Patients (EPIC) project. Along with developing an online and face-to-face training programme for pharmacists, the EPIC Project has implemented an oral anticancer drug database for pharmacists and patients (the "Oralia" Database). Such a database already existed in Germany, launched by the

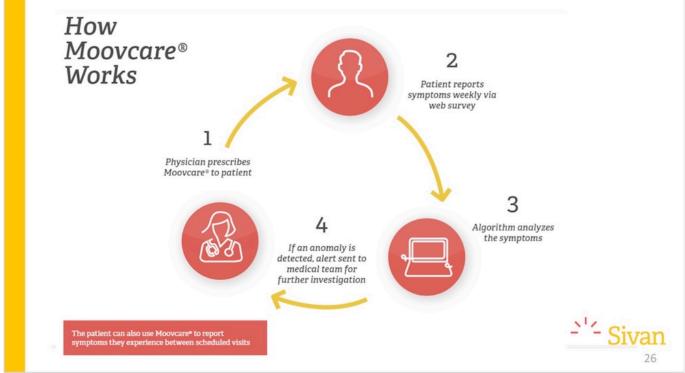
German Society of Oncology Pharmacy (DGOP) in 2008, but had to be adapted to different drug markets and languages. It comprises three modules: a database of oral anticancer drugs monographs, a database of side effects, and a module dedicated to pharmaceutical care of cancer patients. "Oralia" is web-based and securely stores patient data. The patient can record their wellbeing and the side effects experienced. The pharmacist can check that the intake plan was implemented correctly, including in relation to food and interaction with other drugs. When the intake is done correctly but the patient still feels uncomfortable, the patient can have direct contact with the prescribing doctor, who can judge if the prescription and concentration need adjusting.

The EPIC programme started as a pilot in Germany, Estonia and Slovenia and the plans are well advanced to implement it in other countries, e.g. in Poland or Austria. There are also discussions currently taking place with Iceland, and the goal is to keep on extending it to other countries, with the necessary adaptations. There are many languages in Europe, even within the same countries, such as is the case in Germany and its large Turkish community, and Switzerland that has three official languages. A multilingual programme allows the patient to receive information that is wellunderstood. The Epic project's support will give the patient the tools to manage their medication regimen in the best possible way.

The second speaker was **Dr. Hemda Chen**, Chief Medical Officer at Sivan Innovation.

Example 2: Follow-up care for cancer patients (Moovcare® project)

How Moovcare®



Moovcare® is a web and mobile application that detects relapse and complication during follow-up of lung cancer patients. It is a Class I medical device that has proved to be efficacious in prolonging life. Its intelligent analytics platform catches the first signs of an anomaly and promptly alerts the medical team, thus allowing for early intervention. It is a user-friendly digital PRO (patient reported outcome). The patient fills in a short questionnaire, then an internal algorithm analyses the data. If an anomaly is found, the device will immediately trigger an alert to the physician to let them know that the patient has a problem.

The brainchild of oncologist Fabrice Denis, Moovcare is the result of eight years of R&D, begun in 2012 with two feasibility trials, followed in 2013 by a phase II trial, to validate the questionnaire and the algorithm. In 2014, there started a phase III multi-centred prospective randomized trial that

included 133 patients. Patients who were followed by Moovcare showed a significant improvement in overall survival. The results of this trial were presented at ASCO and JNCI and after that, published in JAMA. In 2020 Moovcare became the first medical application to achieve full reimbursement in France. The phase III study was carried out on participants whose median age was 65. As expected, most of them were non-small cell lung carcinoma and a very small portion of small cell lung cancer. They were divided into two groups. One was followed in a standard hospital follow-up every 3 to 6 months. The other group also received Moovcare as part of the follow-up. In the interim analysis it was already clear that the gap in the overall survival was very significant. At this point, all the cohorts were given Moovcare to continue their follow-up, for ethical reason.

The way Moovcare works is very simple. After receiving a prescription from the physician and registering, the patient is sent a link to complete a weekly web survey. This is a very quick survey, a couple of minutes, with yes-no questions. An internal algorithm analyses the symptoms. If it finds anomalies, it sends an automated alert to the physician. From real life examples, a 70-year-old patient filled in the questionnaire, the algorithm compared the answers also to the previous answers and flagged a risk. That turned out to be correct, because the patient had relapsed. In another case, a complication was spotted in a patient that had a pulmonary embolism. The algorithm analysed the answers, and their specific combination led to an alert that was sent to the physician. The patient was immediately invited to the clinic, where PE was detected.

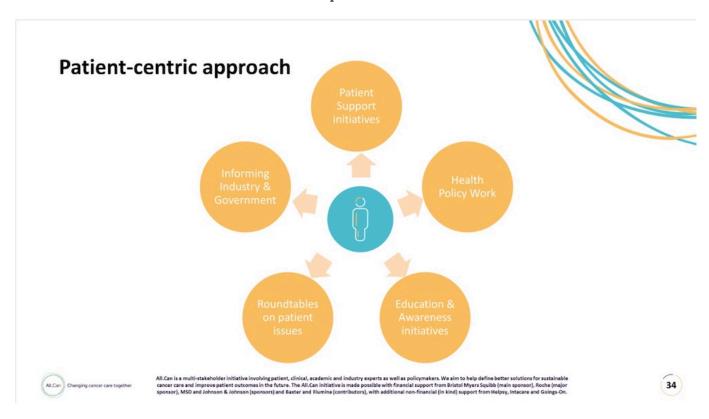
With devises such as these not just the physician, but also the patient can control the disease. And this is the future of medicine. Sivan are developing a whole range of apps. They will all be quite similar. Some are already going to clinical trials in other cancers, and for post-surgery in order to promptly identify any complication related to surgery. Other applications will focus not only on relapse and complications, but also on toxicity and side effects of cancer drugs, to increase compliance, and of course, to promptly take care of toxicities and side effects that patients may experience from specific treatment. Everyone benefits because early detection can lead to early treatment. The application also saves time for the health system. Once the physician goes into the dashboard of their patients, they see everything at a glance, all the history, and the specific reason why the alert was created. This can save a lot of time and cost. And the patient understands what is happening. From patient satisfaction surveys, we know that patients feel very comfortable with this, less anxious, less stressed. They know that someone is following them, and this is very important. The system can also save money for hospitals, as it reduces unnecessary visits to the clinic and to emergency departments.

The last speaker was **Kathleen Barnard**, founder of Save Your Skin Foundation. Mrs Barnard is herself a cancer survivor.

Example 3: Sharing patient data to improve outcomes: challenges and opportunities

Save Your Skin Foundation (SYSF) is a patient-led organization dedicated to the fight against non-melanoma skin cancers, melanoma, and ocular melanoma, through education, advocacy, and awareness initiatives across Canada and beyond. It provides a community of oncology patients and caregivers support throughout the entire continuum of care from prevention and diagnosis to survivorship. Kathleen was diagnosed with stage IV metastatic melanoma in 2003 and had to go through numerous and intense treatments to survive. She knows first-hand how sharing patient data can improve outcome. Her experience led her to create SYSF and to become involved with All.Can Canada, of which she is secretariat. All.Can Canada's aim is to ensure swift, accurate, and appropriately delivered diagnosis at the entry-point into the cancer care system. It also strives to ensure that patients receive coordinated and effective support throughout their cancer journey. As

with All.Can, Save Your Skin has a patient-centric approach to all its work, its strategic objectives, patient support initiatives, education awareness, round-table discussions, health-policy, informing industry partners and government approval bodies. Patients are not only at the centre of all its work, but their voice is heard and included in all the processes.

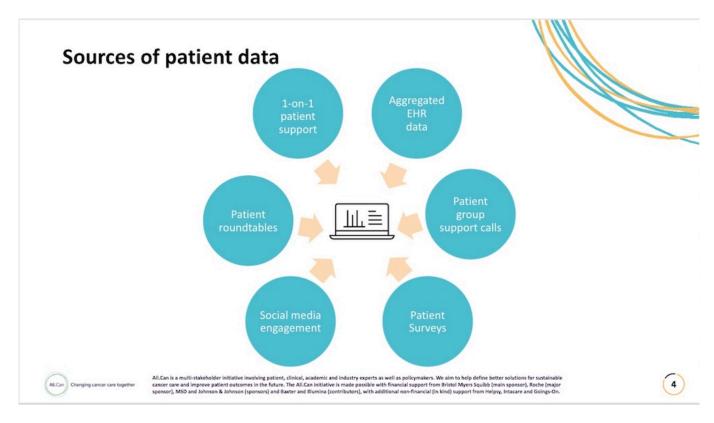


Sources of patient data

Data from patients come from multiple sources. Save Your Skin does 1-on-1 support. There is a 1-800 number that patients can call 24/7, and the line is manned by Kathleen herself. The organisation guarantees that patients will hear back within 24 hours of their call. There are monthly support calls and social engagement through a private Facebook group. There are patient roundtables twice a year, one with newly diagnosed patients and those on treatment, and the other with patients nearing end of treatment and those who have finished. Caregivers are always invited to attend. The objective of these roundtables is to obtain real-life, patient/caregiver insights and perspectives, and to engage in informative and interactive discussions on melanoma and nonmelanoma skin cancers. It is an opportunity for the organisation to hear about different types of treatments, go-to resources and support, including where patients turn to for information about challenges and successes, to make sure that future communication programs include patient input and perspectives, and optimally reflect their needs. There are surveys done throughout the year, depending on what treatments are coming into Canada. The objectives of these surveys are to understand the patients' experience with this type of cancer, their ongoing symptoms, their experience with current therapies, adverse events, the management of those events, and quality of life throughout the treatment. SYSF also carries out surveys on a need-to-know basis. For example, during COVID, patients were reporting about their lack of access to treatment, clinical trials, surgery postponement. So, the organisation did a survey at that time and built a strategic plan to help their patients get through the COVID pandemic. Save Your Skin collaborates with many patient organizations around the globe for several reasons. One being the ability to work together on more global projects with a unified message. But most important is the ability to incorporate the global patient perspective on treatments going through Canada's drug approval process.

Canada has a unique and complex approval system. There is a federal body, then provincial bodies,

and finally individual cancer centres. And that is not even including Quebec, which has its own separate system, called INESSS. Health Canada's review committee considers the clinical and economic analysis of a new drug, which takes roughly seven months. Then, the proposal goes to the Public Health Technology Assessment Committee (HTA) which bases its decision on quality, safety, and efficacy. This takes roughly a year. Then it proceeds to the Pan-Canadian Pharmaceutical Alliance (pCPA), for price negotiation with drug manufacturers. This can take up to 10 months. Lastly, it goes to public formularies and hospitals to set reimbursement terms. In some cases, in smaller provinces with limited budgets, this can take an additional 18 months. SYSF is one of the select patient advocacy organisations that are approved to submit treatment recommendations to CADTH, pCODR and INESSS from the patient perspective. SYSF requests that all patients' voices are heard at all the decision-making processes, except at the negotiation table. All the data collected from their patient data sources at some point in the process goes to the decision makers to influence their approval of the new medicine and beyond. If there is an issue in any of the approval processes, the true patient real-world evidence is there to ensure equal and timely access to treatment options for all Canadians.



Sharing patient data - Policy makers: The data gathered from patients helps inform the conversation with decision makers. Patient data is validated by all treating physicians' feedback in a multidisciplinary approach, through one-on-one conversations, roundtables, and surveys. The validated patient data is then relayed to public policy makers on a yearly basis or as needed, if a problem arises with the patients getting the treatment.

Sharing patient data - Treatment Access: Patients go to SYSF for help with treatment access issues. That data is shared with the organisation's community of physicians to try and resolve the access issues or, in some cases, to arrange for treatment in another jurisdiction.

The complexity of the drug approval process in Canada can cause huge challenges, from time delays to inequity. But the greatest benefit of this validated patient data is that it gets submitted at the beginning of the approval process, and then used when advocating for patients across the country, if challenges arise. This validated patient data also ensures that Save Your Skin Foundation's resources and programs meet the current needs of their patients and caregivers. There are a lot of developments in healthcare technology today. And real-world evidence has become a huge topic in

the healthcare system. The ability to access, analyse, and share comprehensive patient data improves the safety and efficacy of care, and supports better medical decisions, thus improving patient outcomes. Patients can get the treatment they need, and in a timely fashion.

Next Webinar

