



CLINICAL + SYSTEMS  
TRANSFORMATION

Our path to smarter, seamless care

# Backgrounder



“ CST is not something that will happen to us. It’s a tool that we all get to shape. It will help us deliver safer, more efficient and more consistent patient care. ”

**Elizabeth Stanger**

Executive Director,  
CST Site Implementation  
VCH-Coastal

[CSTProject.ca](http://CSTProject.ca)

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## Mission Statement

Our mission: to transform the way care is delivered in our health organizations by improving patient safety, reducing unnecessary work, increasing consistency of care, providing better information and improving system reliability and sustainability.

## Our Future

A connected health system that works – for our patients and the people who care for them.

# What is the Clinical & Systems Transformation?

The Clinical & Systems Transformation (CST) is a joint initiative of three health organizations: Vancouver Coastal Health (VCH), the Provincial Health Services Authority (PHSA) and Providence Health Care (PHC). The CST project is designed to transform health care delivery systems and processes to improve the safety, quality and consistency of the patient and caregiver experience.

CST will support the health organizations in establishing common clinical and process standards, including workflows, order sets, clinical guidelines, integrated plans of care and a common electronic health record. This clinical transformation will be supported by the implementation of a clinical information system that will replace existing aging systems.

The project will be implemented in stages across the health organizations. Find out more at [CSTproject.ca](http://CSTproject.ca) or contact us at [info@CSTproject.ca](mailto:info@CSTproject.ca).

## What's Coming?

- ▶ Health professionals across VCH, PHSA and PHC will adopt common clinical and process standards, including workflows, order sets, clinical guidelines and integrated plans of care.
- ▶ Patient records will be updated and shared electronically via a shared clinical information system.
- ▶ Medications and other instructions will be entered directly into the information system and will immediately become part of the patient's record (computerized provider order entry).
- ▶ Health professionals in acute care facilities across VCH, PHSA and PHC will use a fully electronic 'closed loop medication management' process. This will help improve patient safety by making sure each medication is prescribed and given to the right patient, in the right dose, at the right time, with the right documentation.



“ CST is the right thing to do. It will offer patients and those of us that care for them more up-to-date, in-the-moment communication than we've ever had before. ”

**Karin Olson**

Chief Operating Officer,  
Coastal Community of Care  
VCH

# About the New Clinical Information System

A clinical information system is a computer system designed for collecting, storing, amending and retrieving information relevant to health care delivery. As part of CST, a new system will be implemented to consolidate patient data from over 50 current systems into one electronic health record.

## What this means for health professionals:

- » An electronic patient chart – no more searching for the chart, writing orders on paper, or deciphering handwriting.
- » Easy-to-access information about the patient's condition, allergies, medications and previous medical history.
- » Ability to see a patient's chart while they're still in the Emergency Department, before they have arrived on a hospital unit.



## Education and Training

Staff, physicians, students and non-employees who are impacted by CST will receive education prior to implementation of the new clinical information system.

Education will be based on roles and workflows, and there will be an opportunity to practice before transitioning to the new clinical information system. A variety of learning approaches will be provided to support multiple audiences with different needs. Users of the system will attend a combination of self-paced online learning sessions and specialized classroom training.

Formal education delivery will typically start about 6-8 weeks prior to the implementation of the new clinical information system. This education will be complemented by hands-on practice with the new system, both in and out of the classroom, as well as tools and resources to support education on the unit before and after the go-live periods. New clinical policies and practice changes will further support the clinical transformation and build a foundation for supporting staff through the change.

## On-site User Support

During the implementation period, various teams will be on-site to provide support and training as needed at the point of care. These teams will consist of unit-based "peer support," CST educators, and application support specialists. They will have the skills and expertise to answer questions, and to provide technical expertise and at-the-elbow support to staff and providers during the critical period after the new system is implemented. The team will be supported by "Command Centres" with experts available to resolve any issues that arise.

As staff become familiar with the new system and workflows, the support model will transition into a stabilization period to ensure staff are supported before, during and after the change.

# Project Drivers

CST is our path to smarter, seamless care. These drivers set the standard for measuring our performance:



## Patient Safety First

Reduce errors and adverse events

From timely access to information, to barcode scanning of medications, to better care planning, we're investing in a safer future.



## Best Way, Every Day

Improve quality and consistency of care

We are designing safe, efficient care pathways that reflect the latest evidence and will reduce unnecessary variations in care across our facilities and health care organizations. These changes will be supported by a culture of continuous learning and quality improvement.



## Face Time, Not Chase Time

Improve the health care experience for patients and care teams

When care teams have the information they need at their fingertips, it means more time for patients. Transitions across health care settings will be smoother; everyone will be on the same page. Care teams won't have to ask the same questions over and over or repeat tests.



## Draw on Data

Make better information available to improve decision-making, research and proactive care

Fuller, richer information will give us a clearer picture of how we're doing and where we can improve across health disciplines and organizations. Data will be used to anticipate the needs of at-risk populations and individuals today, and inform plans that will benefit the patients of tomorrow.



## Strengthen our Core

Improve system reliability and sustainability

Right now, we use over 200 systems and programs. Many of our outdated systems will be replaced with one clinical information system, which will connect with other key systems. This will improve the stability of the systems our clinicians are using, enable us to enhance their functionality, and reduce costs over the long term.

# CST Goals

These are the key goals that, if achieved, will signify that the CST project has been successful. This list does not include all intended outcomes of the project.

Drivers	Goals
<b>Patient Safety First</b>	<ul style="list-style-type: none"><li>• Reduce medication-related adverse events</li><li>• Reduce non-medication-related adverse events</li></ul>
<b>Best Way, Every Day</b>	<ul style="list-style-type: none"><li>• Improve delivery of evidence-based care</li></ul>
<b>Face Time, Not Chase Time</b>	<ul style="list-style-type: none"><li>• Reduce time to therapy</li><li>• Reduce non-value added activities</li><li>• Improve information sharing and participation with patient and families at transitions of care and care planning</li></ul>
<b>Draw On Data</b>	<ul style="list-style-type: none"><li>• Inform health system management and quality improvement with better and more accessible data</li><li>• Improve availability of high quality and readily accessible data for research</li><li>• Enable proactive care for at-risk individuals and populations</li></ul>
<b>Strengthen Our Core</b>	<ul style="list-style-type: none"><li>• Improve reliability/stability of the technical environment</li><li>• Reduce clinical information system maintenance costs</li></ul>

# Approach and Timeline

The current Design/Configuration/Validation/Testing phase of the project is expected to last until late 2016, followed by a period of intense planning and preparation in advance of implementation at each group of health care facilities.

Among the first major changes associated with CST is the establishment of a new Vancouver Pharmacy Production Centre (VPPC) at Vancouver General Hospital, which automates the packaging and distribution of prescription medication in unit dose format to facilitate CST's closed-loop safe medication management processes. The VPPC is a foundational component for CST implementation at all sites, and began operating in fall 2016.



The first group of sites, which includes Lions Gate Hospital, HOpe Centre, Evergreen House, North Shore Hospice, Squamish General Hospital, Hilltop House, Pemberton Health Centre and Whistler Health Care Centre, is targeted for implementation in 2017. Group 1 will also include Radiology at Sechelt Hospital, Bella Coola General Hospital and RW Large Memorial Hospital in Bella Bella. CST will be implemented at groups of facilities over the next several years. The BC Cancer Agency will be the second group.

Even before the VPPC starts up and the clinical information system is implemented at the first group of sites, staff and physicians will begin to see evidence of the transformation through the introduction of standardized workflows and order sets in care settings across VCH, PHSA and PHC.

## CST Facts

CST will be implemented at 35-40 facilities, including:

- » 3,416 acute beds
- » 2,148 long-term care beds
- » Tertiary/quaternary academic teaching hospitals
- » 8+ provincial referral services
- » Community hospitals
- » Residential care
- » Primary and community care integration services



...and will affect over 35,000 staff, including roughly:

- » 11,100 nurses
- » 5,800 physicians
- » 3,400 clerical staff
- » 3,200 care assistants
- » 2,800 allied health staff
- » 1,900 researchers and students
- » 600 lab staff
- » 500 health information management staff
- » 400 pharmacy staff
- » 400 managers
- » 3,600 other staff

# Locations\*

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Banfield Residence  
BC Cancer Agency,  
inc. regional cancer centres, satellite clinics  
and community oncology network clinics  
BC Children's Hospital,  
inc. child and youth mental health  
BC Women's Hospital inc. Heartwood  
Women's Centre  
Bella Coola General Hospital  
Brock Fahrni Pavilion  
*Burnaby Centre for Mental Health  
and Addiction*  
*Cedarview Lodge*  
Diamond Centre (ambulatory)  
Dogwood Lodge  
Evergreen Extended Care  
Evergreen House  
Forensic Psychiatric Services  
George Pearson Centre  
GF Strong Rehabilitation Centre  
Hilltop House  
Holy Family Hospital  
Honorita Conway Residence  
HOpe Centre  
*Kiwanis Care Centre*  
Lions Gate Hospital  
*Looking Glass Residence*

Mary Pack Arthritis  
(inc. clinics in Cranbrook, Penticton,  
Vancouver and Victoria)  
Minoru Residence  
Mount Saint Joseph Hospital  
North Shore Hospice  
Pemberton Health Centre  
Powell River General Hospital  
R.W. Large Memorial Hospital (Bella Bella)  
Richmond Hospital  
Richmond Lions Manor  
Sechelt Hospital  
Squamish General Hospital  
St. John's Hospice  
St. Paul's Hospital  
inc. seven community dialysis units  
St. Vincent's Langara  
*Sumac Place*  
Sunny Hill Health Centre  
UBC Hospital inc. Koerner and  
Purdy Pavilions  
Vancouver General Hospital  
Whistler Health Care Centre  
Willingdon Creek Village  
Youville Residence

\*Please note this list is subject to change. Locations in italics are not fully confirmed.

## More Information

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**CSTproject.ca**  
info@CSTproject.ca

**Dr. Eric Grafstein**  
Chief Medical Information Officer, VCH/PHC  
Eric.Grafstein@vch.ca

**Dr. Alain Gagnon**  
Chief Medical Information Officer, PHSA  
Alain.Gagnon@phsa.ca

**Barb Lawrie**  
Chief Nursing Officer, VCH/CST  
Barb.Lawrie@vch.ca

**Elizabeth Stanger**  
Executive Director  
CST Site Implementation, VCH-Coastal  
Elizabeth.Stanger@vch.ca

**Vicky Crompton**  
CST Executive Director and  
Transformation Lead, PHSA  
VCrompton@phsa.ca

**Yoel Robens-Paradise**  
Vice President CST and  
Health Information Management, PHC  
YParadise@providencehealth.bc.ca