

Delivering exceptional patient care



*Bayshore*<sup>®</sup>  
HealthCare

# National Integrated Palliative Program

Using Electronic Clinical Management Systems to Drive  
Best Practices in Palliative Care

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Mital Patel, R Pharm.

Leslie Marvell, RN, BScN, CONC(C), CHPCN(C)

# Challenges Facing Community Palliative Care



- **Situation** = A 54 year old female is suddenly needing to be prescribed morphine as Tylenol #3 oral pain medication not addressing symptoms. Family is with the patient at home but has not been told that patient is palliative. Physician order indicates drug but missing duration and formulation. Health authority wants it delivered within 3 hours as a rush request with 2 hours drive time and sends incorrect supplies order to align with physician order. Nursing visit scheduled for 4 hours from order being sent.
- **Problem Statement** = medical order needs verifying with review between pharmacist and physician, supplies order needs correcting to align with medical order, need to communicate changes regarding delivery expected timing to care team, and communication must be sensitive to family situation and patient choices.

# How We Resolve the Situation

## Our approach to support clinicians:

- Electronic clinical management system to support nurses to follow collaborative care plans, track PPS scores, building in advance planning directives early in journey following the “Speak Up” campaign, set goals of care, and triggering need for family conversations, medication reviews and ordering SRK proactively
- BPGs and decision supports built into eCMS to guide practice supporting palliative journeys more proactively so patient and family are prepared for making decisions and feel supported through journey

# How We Resolve the Situation

## Our approach to support physicians and pharmacists:

- Electronic order sets that guides correct formulation and dispensing guidelines and supports physicians with decision making when transitioning from oral to infusion based medications
- Established medical order templates to support physicians on prescribing infusion based medications, particularly when not familiar with complexity of order requirements





# How We Resolve the Situation

## Our approach to support case managers:

- Online, app-based decision support tool allows health authority to select best selection of supplies that match the specific physician order that accommodates, type of medication, route, duration, and local infusion guidelines
- Electronic formulary catalogue that supports Case Managers to view different supply options, understand equivalencies, and kit contents
- For some programs, we are able to allow case managers to order directly from online catalogue



# How We Resolve the Situation

## Our approach to support care team:

- Online order tracking system that allows home care nurses to log in and see ETA for medication and supplies
- For some programs, we are able to update a care team portal allowing view of lab results, physician orders, pre and post infusion results, and changes in status



# Palliative Integrated Teams

- Bayshore HealthCare is a Canadian-owned provider of home and community health care services
- Integrating nursing and pharmacy services supporting palliative care
- Includes Bayshore Home Care Solutions and Bayshore Specialty Rx

The logo for Bayshore Pharmacy features the word "Bayshore" in a dark blue, cursive-style font with a registered trademark symbol. To the left of the "B" is a stylized teal wave icon. Below "Bayshore" is the word "Pharmacy" in a teal, sans-serif font.

The logo for Bayshore Home Care Solutions features the word "Bayshore" in a dark blue, cursive-style font with a registered trademark symbol. To the left of the "B" is a stylized brown wave icon. Below "Bayshore" is the phrase "Home Care Solutions" in a brown, sans-serif font.

The logo for Bayshore HealthCare features the word "Bayshore" in a dark blue, cursive-style font with a registered trademark symbol. To the left of the "B" is a stylized teal wave icon. Below "Bayshore" is the word "HealthCare" in a dark blue, sans-serif font.



# Integrated Care Teams

- Teams can include nursing, PSW, therapies, pharmacy, medical equipment and supplies, case management
- May include virtual care delivery model for transfer of authority or clinical consultation
- Able to interface data across systems for stakeholder communication and reporting



- Epsilon™ is a comprehensive platform which includes
  - integrated office and field applications,
  - leading-edge mobile documentation and decision support systems,
  - proprietary processes that integrate all elements of safe, efficient and effective care delivery
- The platform is designed to meet present and emerging home care market needs in the areas of community and facility cluster care, quality indicator reporting requirements and outcome based care models

# Clinical Order Sets

- The Clinical and care pathways, electronic Medication Administration Records and advanced electronic forms and flow sheets allow for real-time data interchange and decision support at the client location, at the time of care

**Bunny, Lola** Status: Incomplete  
Step: Visiting Nursing Entry Care: • eMAR  
Elements: • General Care and Risk Hazard  
• Hospice Palliative

Date: 10/15/2018 12:00 AM 12:00 AM Order: Visit: Reason:

Care plan: Hospice Palliative Pain Vitals eMAR General Care/Risk

**EMAR TAB**  
DISCIPLINE: All CARE PATHWAY: All MET/DONE: All

☐ Yes ☐ No

To toggle between the ability to view profile and view admin records, use the side tabs below.

Medications/Drugs (Current)										
Code	Description	Prescribed Date	Expiration Date	Brand Name	Status	Strength	Units	Quantity	Frequency	Route
2224704	LASIX	5/9/2013		LASIX	New	20	mg		o.d.	PO
2041456	ATIVAN	5/9/2013		ATIVAN	New	2	mg		p.r.n.	SL
626112	B-12 1000 INJ 1000MCG/ML	5/9/2013		B-12 1000...	New	1	ml		monthly	IM
24694	ATARAX SYRUP 2MG/ML	5/9/2013		ATARAX S...	New	6	ml		o.d.	PO
>	HYDROMORPH HYDROMORPHONE HCL	10/15/2018		HYDROM...	New	2	mg		q6h	PO

# Clinical Order Sets

- Together, this makes the clinical documentation more timely and accurate
- Clinical documentation forms the basis of a longitudinal client Electronic Medical Record

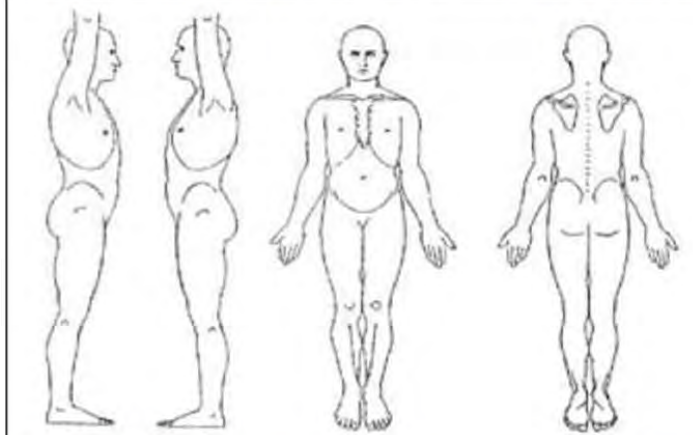
Date: 10/15/2018 12:00 AM 12:00 AM Order: Visit:

Care plan Hospice Palliative Pain Vitals eMAR General Care/Risk

**PAIN TAB**

DISCIPLINE: All CARE PATHWAY: All

On the diagram, shade in the areas where the client feels pain. Put an X on the area that hurts the most.



Follow-ups/Notes Validation

# Clinical Order Sets

- Epsilon™ has been implemented across various programs since 2013 and is accompanied by extensive staff education and support.

The screenshot shows the Epsilon clinical order set interface. At the top, there is a 'Home' tab and a toolbar with icons for 'Save and Close', 'Cancel', 'Print', 'Complete', 'Validate', 'Add Entry', 'Customize Care Pathway', 'Care Elements', 'Dashboard', and 'Notes'. Below the toolbar, the patient's name 'Bunny, Lola' is displayed, along with 'Step: Visiting Nursing Entry'. To the right, the status is 'Incomplete', and the care elements are 'eMAR', 'General Care and Risk Hazard', and 'Hospice Palliative'. Below this, there are dropdown menus for 'Date' (10/15/2018), 'Time' (12:00 AM), 'Order' (12:00 AM), 'Visit', and 'Reason'. A row of buttons includes 'Care plan', 'Hospice Palliative', 'Pain', 'Vitals', 'eMAR', and 'General Care/Risk'. The 'HOSPICE PALLIATIVE TAB' is selected, showing a table with 'QUESTIONS' and 'N/A' columns. The questions listed are: Client Instructions, Pain Score, Tiredness Score, Nausea Score, Depression Score (highlighted), Anxiety Score, Drowsiness Score, Appetite Score, Well-being Score, Shortness of Breath Score, and Other. At the bottom, there are tabs for 'Follow-ups/Notes' and 'Validation'.

QUESTIONS	N/A
Client Instructions	
Pain Score	
Tiredness Score	
Nausea Score	
Depression Score	
Anxiety Score	
Drowsiness Score	
Appetite Score	
Well-being Score	
Shortness of Breath Score	
Other	



# Clinical Order Sets

- We follow the principles of a palliative approach to care ensuring we are meeting client “goals of care” and often reinforce the CHPCA “Speak UP” campaign

The screenshot shows a clinical order set interface for a patient named 'Bunny, Lola'. The interface includes a top toolbar with icons for Save and Close, Cancel, Print, Complete, Validate, Add Entry, Customize Care Pathway, Care Elements, Dashboard, and Notes. Below the toolbar, the patient's name 'Bunny, Lola' is displayed, along with the step 'Visiting Nursing Entry'. The status is 'Incomplete', and the care elements include 'eMAR', 'General Care and Risk Hazard', and 'Hospice Palliative'. The interface also shows a date and time selector (10/15/2018, 12:00 AM) and a dropdown for 'Order'. Below this, there are tabs for 'Care plan', 'Hospice Palliative', 'Pain', 'Vitals', 'eMAR', and 'General Care/Risk'. The 'CARE PLAN TAB' is selected, showing a table with columns for 'Actual/Potential risk related to impaired health status', 'Client/caregiver identifies most responsible physician identified', 'Client verbalizes understanding of disease progression and treatment plan', 'Client/caregiver identifies POA-PC or substitute decision maker', 'Client/caregiver verbalizes resuscitation status', and 'Client/caregiver maintains optimal pain control'. Each row has a checkbox and a dropdown menu for 'Client/caregiver identifies most responsible physician identified'.

Actual/Potential risk related to impaired health status	Client/caregiver identifies most responsible physician identified	Client verbalizes understanding of disease progression and treatment plan	Client/caregiver identifies POA-PC or substitute decision maker	Client/caregiver verbalizes resuscitation status	Client/caregiver maintains optimal pain control
Actual/Potential risk related to impaired health status	Client/caregiver identifies most responsible physician identified	Client verbalizes understanding of disease progression and treatment plan	Client/caregiver identifies POA-PC or substitute decision maker	Client/caregiver verbalizes resuscitation status	Client/caregiver maintains optimal pain control
Actual/Potential medication mismanagement	Client/caregiver identifies most responsible physician identified	Client verbalizes understanding of disease progression and treatment plan	Client/caregiver identifies POA-PC or substitute decision maker	Client/caregiver verbalizes resuscitation status	Client/caregiver maintains optimal pain control
Phase 1: Stable (PPS 100%-70%) Knowledge deficit r/t Hospice Palliative diagnosis, prognosis, and or disease process	Client/caregiver identifies most responsible physician identified	Client verbalizes understanding of disease progression and treatment plan	Client/caregiver identifies POA-PC or substitute decision maker	Client/caregiver verbalizes resuscitation status	Client/caregiver maintains optimal pain control
Phase 1: Stable (PPS 100%-70%) Knowledge deficit r/t HPC advanced care planning	Client/caregiver identifies POA-PC or substitute decision maker	Client/caregiver verbalizes resuscitation status	Client/caregiver identifies POA-PC or substitute decision maker	Client/caregiver verbalizes resuscitation status	Client/caregiver maintains optimal pain control
Phase 1: Stable (PPS 100%-70%) Comfort r/t pain	Client/caregiver identifies POA-PC or substitute decision maker	Client/caregiver verbalizes resuscitation status	Client/caregiver identifies POA-PC or substitute decision maker	Client/caregiver verbalizes resuscitation status	Client/caregiver maintains optimal pain control

# Specialty Pharmacy Network

- Pain management and palliative care programs
- Ambulatory pumps programming and maintenance expertise
- IV administration expert consultants
- Cold chain distribution
- Warehouse
- Logistics services



# Specialty Pharmacy Network

- 13 specialty infusion pharmacies across the country
- ISO-5 Clean room in compliance with USP<797> and NAPRA standards
- Dedicated Hazardous compounding room in compliance with USP<800>
- High Tech fully automated TPN compounder





# Pharmacy System – Kroll™



- Kroll™ is the pharmacy software which helps pharmacist optimize operations and enhance customer experience.
- It has features like:
  - Prescription filling
  - Online adjudication
  - Alerts to help pharmacist minimize:
    - Duplication of therapy
    - Drug – Drug Interaction
    - Drug – Allergy Interaction
  - Extensive reporting

The screenshot displays the Kroll pharmacy software interface for creating a new prescription. The window title is "Store 1 (LHIN) --1- New Rx for Patel, Mitalkumar". The menu bar includes File, Edit, Recent, Rx, View, Labels, Profile, Reports, Utilities, NH, Cards, Session, and Help. The version is 10. The toolbar shows buttons for F3 - Patient, F5 - Drug, F7 - Doctor, F9 - Workflow, F11 - Drop-off, F12 - Fill Rx, and Alt+X - Start. The main window is divided into several sections:

- Patient Search:** Name: Patel, Mitalkumar, Age: 29, Address: 70 Esna Park Drive, City: Markham, Prov: ON, Phone: (647) 709-1413, ODB: P8176094467.
- Drug Search:** Brand: Haloperidol Inj Smp Sandoz, Generic: Haloperidol (Haldol), Pack: 1 Form ML, ODB BAP: \$4.83, On-Hand: \$38.52, DIN: 00808652, Min Qty: 0.
- Prescription Details:** Sig: SRKCEHALO, Route of Admin: Intramuscular, Dosage Form: Ampul (mL), Unit Dose: 1 F2.
- Dispensing Information:** Disp Qty: 2 mL, Bem Qty: 2, 1, Days: 1, Prod Sel: (NONE), O/W: Faxed, Labels: 1 F2.
- Costs:** Acq Cost: \$9.66, Markup: \$0.77, Fee: \$8.83, Total: \$19.26.
- Alerts:** Not enough inventory for Rx, Auto Order is disabled for this drug, Delivery Label will be printed.
- Plans:** Rx Plans: 208, Plan Pays: Not Adj., ESI41: Not Adj., Inter: DA, Cash: Not Adj., Deduct: \$0.00.
- Next Disp Qty:** 0, Min Interval Days: 0, Max Disp Qty: 0, Auto Refill: [X] Auto Refill, Rx Comments (1).


The right sidebar contains various actions and views, including Make Rx Unfilled, Make Rx Not Dispensed, Make Rx Stock Transfer, Adapt Rx, Add Rx Image, Transfer Rx From Another Store, Call Doctor, Counsel Patient on Pickup, Owe Quantity, View Clinical Interactions, Plan Information, Patient Plan Information, Generic Equivalents, Unit Dose Info, Work Order, Rx Counseling History, and View Workflow Detail.

# Pharmacy Order Sets

- Order sets are Bayshore designed pdf documents that assist:
  - Doctor:
    - In complex calculations when changing oral/topical pain medication to Subcutaneous pain pump order. Order sets were developed to include automation for formula calculations
  - Bayshore Pharmacist and Pharmacy Assistants:
    - In making sure compound sheet are created correctly with accurate calculation, automatic selection of proper container and detailed information about drug being compounded
- Order sets are tested thoroughly by a team of clinicians, pharmacists and IT experts to make sure they deliver what they are designed for expected results




# Opioid Conversion Guide


	<b>OPIOID CONVERSION GUIDE</b>	Units 9-11, 70 Essex Park Drive, Markham, ON L3R 6E7 T: 1-888-313-6968 F: 1-888-287-8577
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Patient's current medication		Conversion factor
Name of medication	Total dose in last 24 hours	
Morphine oral	20 mg	10 : 1
Hydromorphone SC	5 mg	1 : 1
Hydromorphone oral	10 mg	2 : 1
Morphine oral		
Morphine SC		
Hydromorphone oral		
Hydromorphone SC		
Oxycodone		
Fentanyl Patch		
Fentanyl SC		
Desired medication for parenteral pain pump order		Hydromorphone SC
Route of administration <i>If IV, basal rate vol. must be min. 0.5ml/hr</i>		SC
Recommended rate of administration	0.5	mg/hr
Enter the frequency (minutes) you want patient to get a bolus dose eg. 60 minutes, 30 minutes Recommended: 30 minutes	20	minutes
Recommended PCA bolus dose	0.4	mg
Preferred concentration	2	mg/mL
Preferred reservoir size	100	mL

# Compounding Order I

	<b>CE</b> <span style="border: 1px solid black; padding: 0 5px;">-</span> <b>Compounding Sheet</b> <b>HYDROmorphone PCA (CADD Solis)</b> Prepared By: _____ Checked By: _____	Units 9-11, 70 Esna Park Drive, Markham, ON L3R 6E7 T: 1-888-313-6988 F: 1-888-287-8577								
Name: Patient Name		Date: 5-Oct-2018								
Order: HYDROmorphone <u>7</u> mg/hr; (max <u>7</u> mg/hr); S <span style="border: 1px solid black; padding: 0 5px;">-</span> Bolus <u>10</u> mg; (max <u>10</u> mg); q <u>30</u> min PRN										
Final Product: HYDROmorphone <u>20</u> mg/mL = <u>2000</u> mg in <u>100</u> mL										
Stability: 30 Days	Storage: Refrigerate	Bag Size: <u>100</u> mL ***Sterile Empty Bag*** Remove Air: YES								
Comment/Special Instructions <div style="display: flex; align-items: center; justify-content: center;"> <input style="width: 30px; height: 30px; margin-right: 10px;" type="checkbox"/> <span style="font-size: 2em; font-weight: bold;">***Sterile Empty Bag***</span> </div>										
Medication	Final Conc.	Total Amount to withdraw	Quantity	Due Date	Comp Date	Prep room Initials	Clean Room Initials	Prep Room Initials	R. Ph. Or R. Ph. T Initials	Cassette /Bag
Additive 1										
HYDROmorphone	<u>100</u> mg/mL	<u>20</u> mL								
Lot #										
Expiry										
Additive 2										
Normal Saline		<u>80</u> mL								
REFILLS										

# Compounding Order II

	<b>MH</b> <span style="border: 1px solid black; padding: 0 2px;">▼</span> <b>Compounding Sheet</b> <b>HYDROmorphine PCA (CADD Solis)</b> Prepared By: _____ Checked By: _____	Units 9-11, 70 Esna Park Drive, Markham, ON L3R 6E7 T: 1-888-313-6988 F: 1-888-287-8577								
Name: Patient Name		Date: 5-Oct-2018								
Order: HYDROmorphine <u>7</u> mg/hr;(max <u>7</u> mg/hr); S <span style="border: 1px solid black; padding: 0 2px;">▼</span> Bolus <u>10</u> mg;(max <u>10</u> mg); q <u>30</u> min PRN										
Final Product: HYDROmorphine <u>20</u> mg/mL = <u>2000</u> mg in <u>100</u> mL										
Stability: 30 Days	Storage: Refrigerate	Bag Size: <u>100</u> mL ***CADD Cassette*** Remove Air: YES								
Comment/Special Instructions <div style="display: flex; align-items: center; justify-content: center;"> <input style="width: 20px; height: 20px; margin-right: 10px;" type="checkbox"/> <span style="font-size: 1.5em; font-weight: bold;">***CADD Cassette***</span> </div>										
Medication	Final Conc.	Total Amount to withdraw	Quantity	Due Date	Comp Date	Prep room Initials	Clean Room Initials	Prep Room Initials	R. Ph. Or R. Ph. T Initials	Cassette /Bag
Additive 1	<u>100</u> mg/mL	<u>20</u> mL								
<b>HYDROmorphine</b> <small>Lot #</small> <small>Expiry</small>										
Additive 2		<u>80</u> mL								
<b>Normal Saline</b>										
REFILLS										

# Benefits to Electronic Order Sets

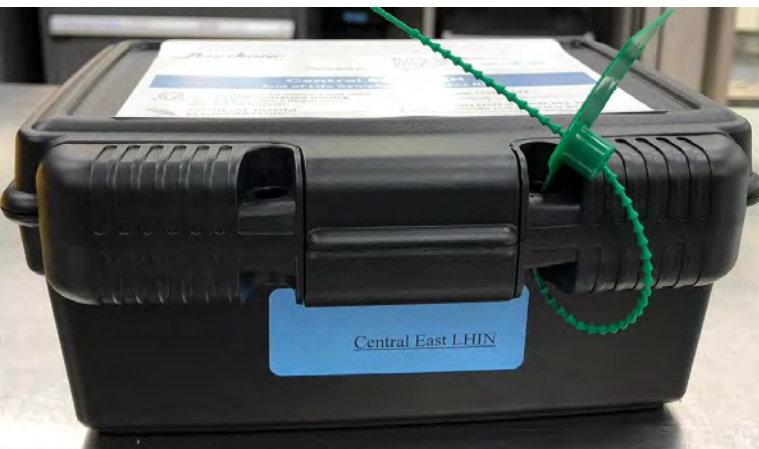
- Clarification of orders process has:
  - Reduced the number of physician errors
  - Improved time expected to process orders
  - Increased standardization of complex medication dispensing orders
  - Reduced duplication and number of errors in supply orders



# Symptom Relief Kits

## Benefits:

- Readiness for family
- Support for patient
- Part of advanced care planning





# Evaluation of Programs

## Metrics to Evaluate Pharmacy Programs:

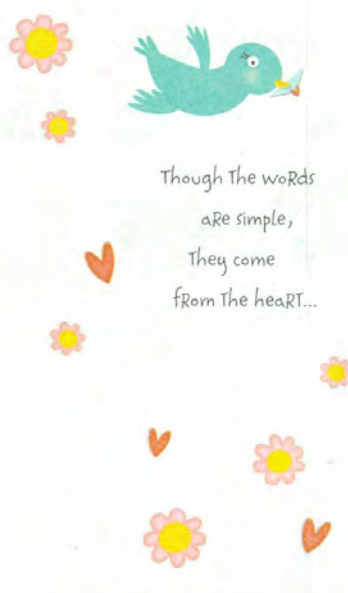
- # Physician errors / total orders
  - Triggers need for additional support for physicians by region
- # order errors for supplies / total supply orders
  - Need for support for additional training for case managers by region
- # patients with SRKs / # palliative program patients in a year
  - Need for support for additional ACP training
- # Deliveries on time / total orders
  - Timely access to pain and symptom relief

# Evaluation of Programs

## Metrics to Evaluate Clinical Programs:

- Length of Stay by Palliative Performance Scale stage compared across programs
  - Better outcomes achieved with early referrals
- Satisfaction surveys
  - Family experience helps to understand risk of burn out and need for bereavement support
- Preferred place of death
  - Patient satisfaction and managing change through palliative journey

# Thank You



Dear Pharmacists,  
I wanted to send a quick word of thank you. Our team at Lakeridge Health Oshawa try to provide the best in home palliative care for our patients. Their conditions change so quickly and we try to be prepared but often we are in need of urgent medications.  
Your team is always so accommodating...and kind about our urgent requests! The patients thank us often and never see you or the work you do to thank you directly. So I want to thank you.  
You have chosen a hard job as a pharmacist there are many other easier options. I guess the same could be said for the physicians on our team too...but as I said

Thank you.  
We see the patients, we hear their thank yous, we see the relief of the medicines you provide.  
Thank you for all you do and your commitment to a challenging time sensitive profession.  
Sincerely,  
Dr. Caroline McAllister

*Dear Pharmacists,*

*I would like to send a quick word of thank you. Our team at Lakeridge Health Oshawa try to provide the best in home palliative care for our patients. Their conditions change so quickly and we try to be prepared but often we are in need of urgent medications.*

*Your team is always so accommodating...and kind about our urgent requests! The patients thank us often and never see you or the work you do to thank you directly. So I want to thank you.*

*You have chosen a hard job as a pharmacist, there are many other easier options. I guess the same could be said for the physicians on our team too...but as I said we see the patients, we hear their thank you, we see the relief of the medicines you provide.*

*Thank you for all you do and your commitment to a challenging time sensitive profession.*

*Sincerely, Dr. Caroline McAllister*

## Our Presence Across Canada



Bayshore HealthCare  
is a family of more than  
**13,000 staff members**



Over **100** Locations  
**65** Home Care Offices  
**13** Pharmacies  
**75+** Community Care Clinics



Every year we take care  
of more than **375,000**  
**Canadians**



Bayshore caregivers  
provide over **11,000,000**  
**hours of care per year**

# Over 50 Years of Health Care in Canada



RNAO  
BEST PRACTICE  
SPOTLIGHT  
ORGANIZATION  
CANADA

ORGANISME  
VEDETTE EN PRATIQUES  
EXEMPLAIRES





# Passionate, Caring

*Imagine being the difference.*



# Thank you

*from the Bayshore Family*

We look forward to working with you  
and supporting your health, your way, in your community.

