EMS Palliative and End of Life Care Assess, Treat and Refer Program

What's Up Doc?
March 3, 2017

Faculty/Presenter Disclosure

- Faculty: Aynharan Sinnarajah

- Relationships with commercial interests: None
  - Grants/Research Support: None
  - Speakers Bureau/Honoraria: None
  - Consulting Fees: None
  - Other: None

The Opportunity

- Most Canadians prefer to be at home when receiving palliative and end of life care
- 86% of Canadians prefer to die out of hospital (home or in other facility), 70% currently die in hospital

What Canadians Say: The Way Forward Survey Report, December 2013 (Harris Decima, Canadian Hospice Palliative Care Association)

- Complex care issues leave community clinicians and paramedics no option but to transport patients to hospital

The Opportunity

Recommendation from the Health Quality Council of Alberta (2012):

"Strive to support palliative patients who have a sudden, unexpected symptom crisis so these patients have options for immediate care at home that can obviate the need to go to an emergency department and support the patient and family's decision to remain at home"

www.hqca.ca, February 2012 Executive Summary, p. 15

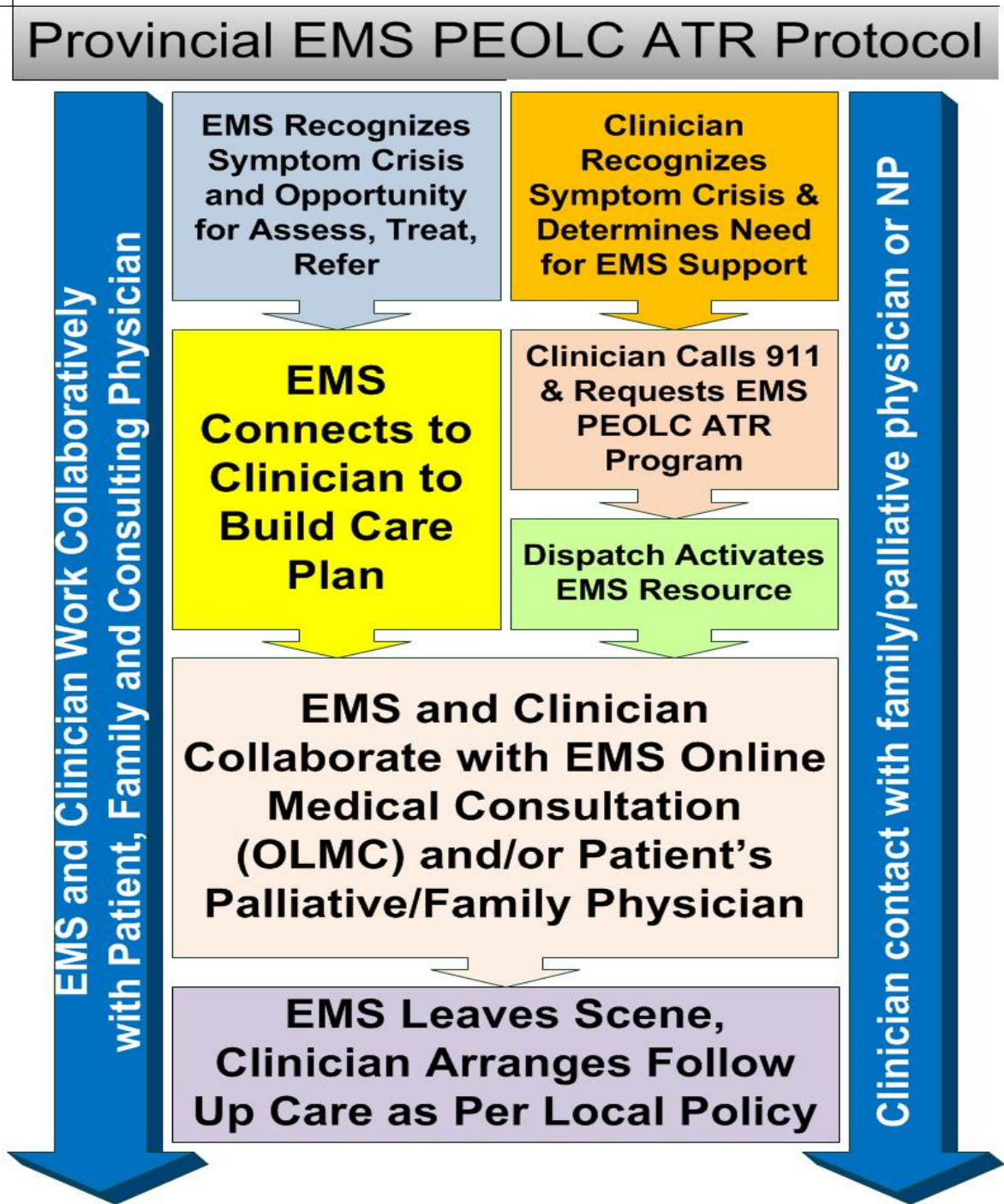
Palliative Assess, Treat and Refer Goals

- Provide urgent care and treatment in the home
- Enhance patient/client and family satisfaction
- Encourage interdisciplinary collaboration
- Reduce potentially avoidable transports to ED and acute care usage
- Determine frequent causes and outcomes when palliative individuals or families require EMS services

Alberta Health Services

Teamwork

Collaborative approach between EMS, primary/palliative care team and physician on call with follow up to patient's responsible physician



Recognition/Inclusion Criteria

- Adult patient presenting with symptom crisis (increasing pain, shortness of breath, delirium, nausea/vomiting)
- Overall care currently focused on comfort and symptom management
- Unable to manage with current care plan/ resources
- Patient may be managed at home if additional urgent medications/supports provided

Collaborative Care Model

- Collaborative decision making between EMS, clinician, on call physician, patient and family
- Align care with patient's wishes and Goals of Care when possible
- Transport may still be most appropriate decision based on resources available

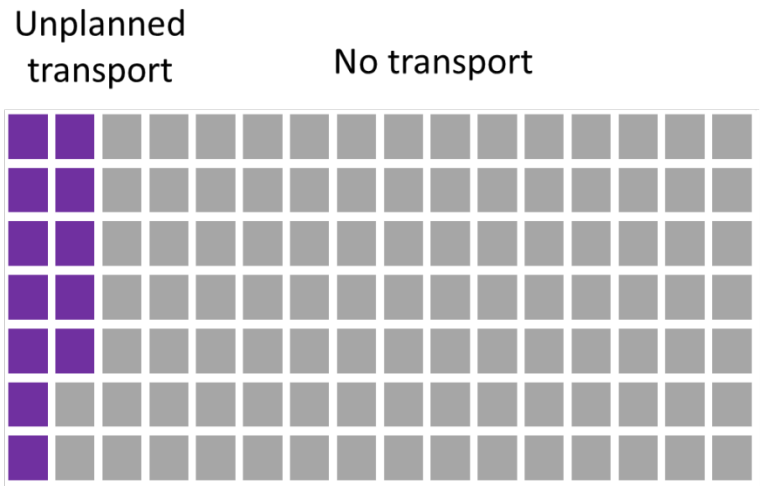
Key Features

- Rolled out provincially
  - Home care and supportive living
  - Direct delivery and contracted EMS providers
  - Basic and advanced life support EMS providers
- Uses existing continuing care and EMS resources (transport capable)
- Integrated into current processes
- Uses current EMS formulary and equipment

Year 1 Preliminary Learnings

- April 1, 2015 – March 31, 2016
- Activations to date across province, in all zones, urban and rural
- Most patients treated in place if appropriate and preferred
- High level of staff (EMS and continuing care) and family satisfaction
- No negative impact on EMS time on task

Most Patients Treated at Home



89% of patients were successfully treated in place

(n=112 in year one – March 2015 through March 2016)

Reasons for transfer to ED included:

1) further assessment or management
2) patient/family preference
3) traumatic injury
4) procedure

Common Complaints

Primary Complaint	Count	%
Pain	**32**	**29**
Dyspnea	**29**	**26**
Altered level of consciousness	**13**	**12**
Clinician support	10	9
Nausea/vomiting	7	6
Dehydration	5	5
Nausea/vomiting and pain	4	4
Lift Assist	3	3
Hyperglycemia	2	2
Traumatic Injury	2	2
One of each (cardiac arrest, catheter reinsertion, general malaise/weakness, hypoglycemia, seizure)	5	5
Total	**112**	**100**

Alberta Health Services

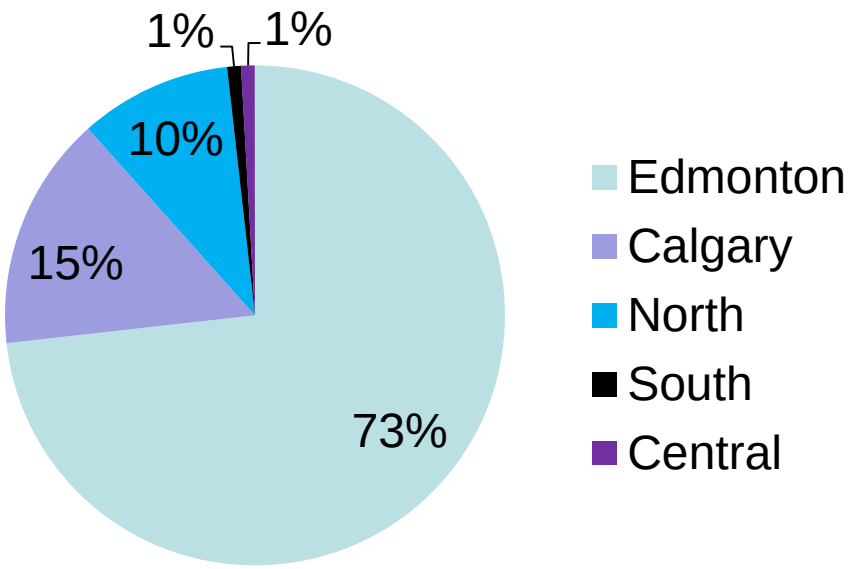
Interventions & Medications Administered

Intervention	Count	%
Intravenous (IV) initiation	34	16%
Subcutaneous (SC) medication administration	27	13%
Intravenous (IV) medication administration	25	12%
Oxygen administration	23	11%
Fluid administration	22	10%
Intramuscular (IM) medication administration	20	9%
ECG - 12 Lead	14	7%
ECG - 4 Lead	10	5%
Sublingual (SL) medication administration	9	4%
Nebulized medication administration	8	4%
Assistance with RN orders	7	3%
Lift Assist/ Positioning	4	2%
Clinician support	3	1%
Suctioning	3	1%
Assessment only, no treatment	2	1%
Oxygen administration discontinued	1	1%
Per oral (PO) medication administration	1	1%
Total	**213**	**100%**

Medication and Agents	Count	%
Morphine	**33**	**22%**
Normal saline	**18**	**12%**
Oxygen	**16**	**11%**
Midazolam	15	10%
Fentanyl	10	7%
Ondansetron	10	7%
Haloperidol	7	5%
Lorazepam	6	4%
Dexamethasone	6	4%
Albuterol/Ipratropium	5	3%
Dimenhydrinate	5	3%
Hydromorphone*	4	3%
Metoclopramide	3	2%
Two of each (Atropine, Ipratropium Bromide, Ketamine, Salbutamol, Nitroglycerine)	10	5%
One of each (Diphenhydramine, D50W, Oxycodone*)	3	3%
Total	**151**	**100%**

Activation Distribution (Year 1)

Zone Distribution – ATR Events



Why This Distribution?

- Edmonton & Calgary had programs previously
- Tailored/rolling implementation by zone (rural vs urban, home living vs supportive living, limited to patients with palliative consult)
- Various areas considered implemented at different times during 2015/16 fiscal
- Different models for community palliative care across zones

Time of Day Distribution

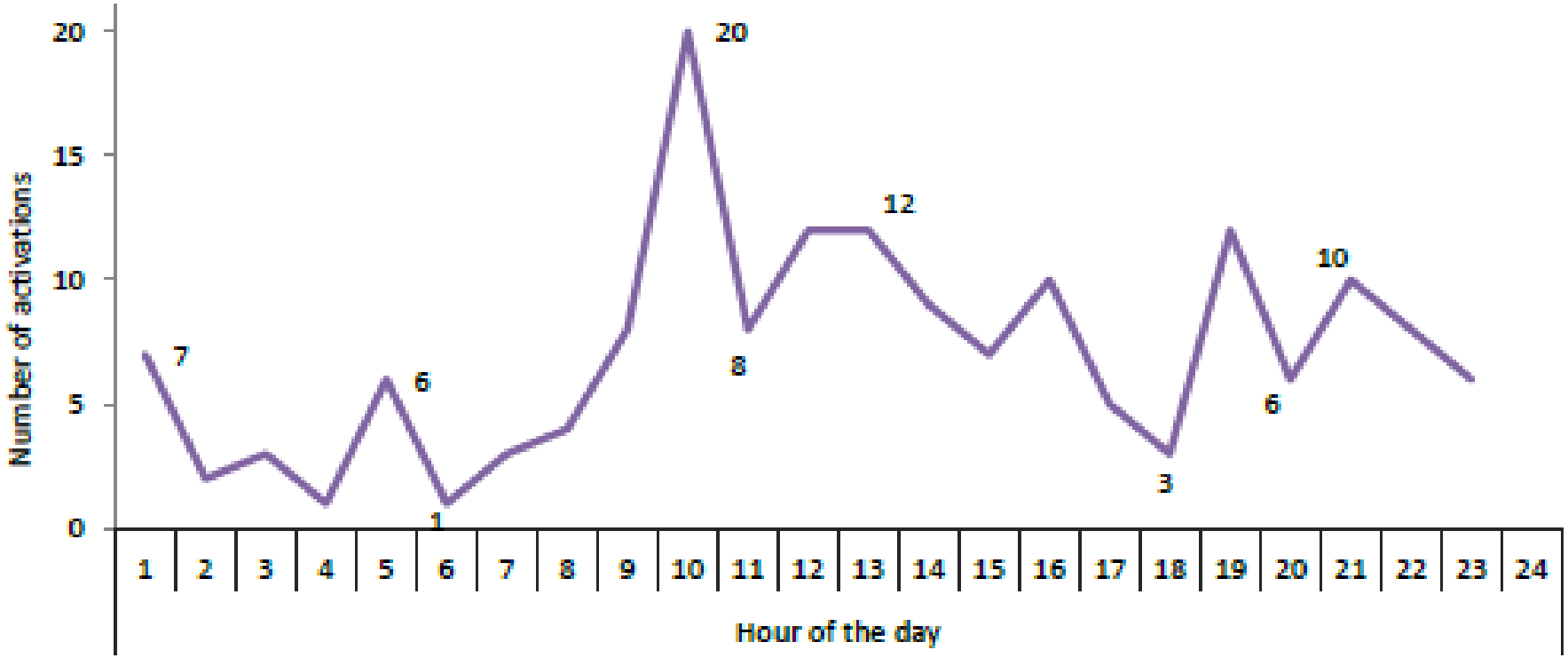
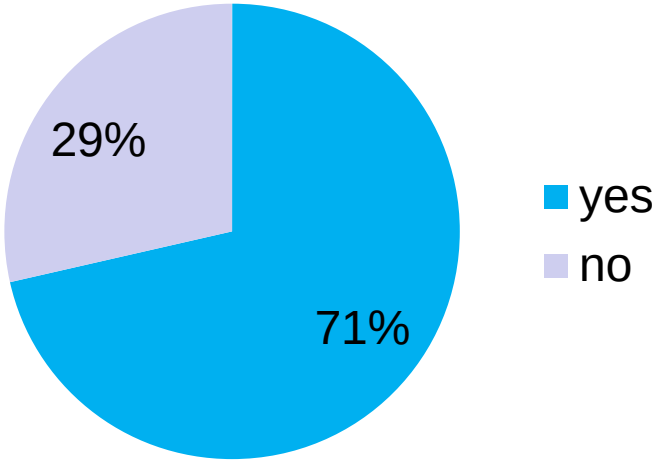


Figure 5. ATR activations by hour of the day, n=165

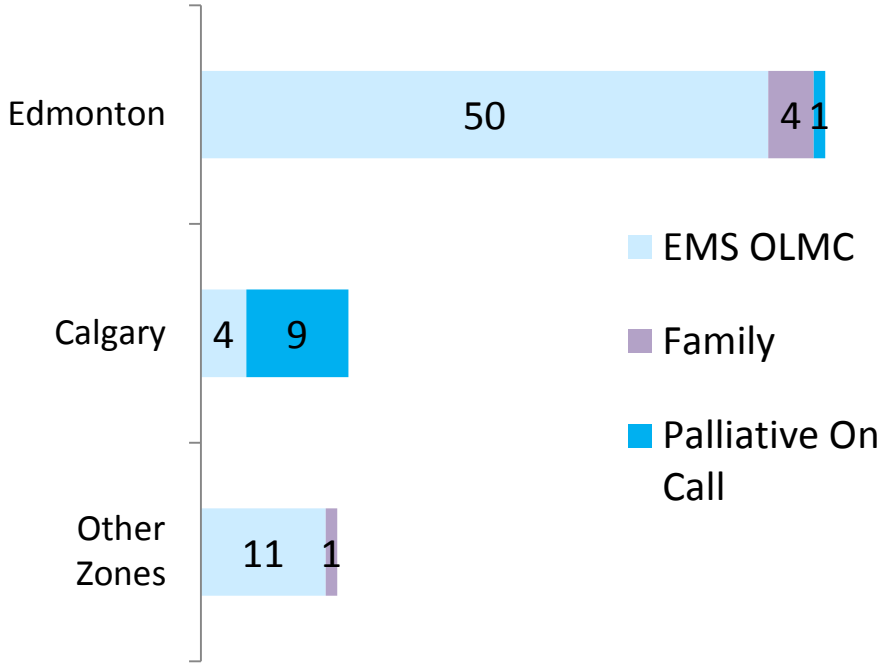
Physician Consult

Prevalence of Physician Contact



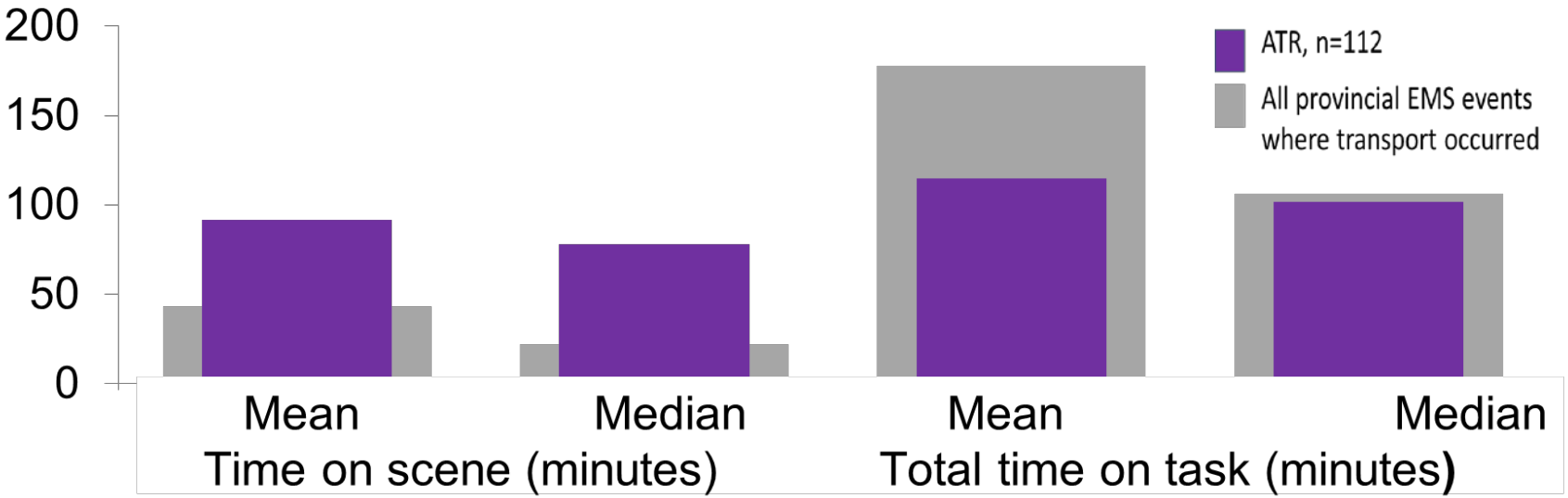
Upon review, events where no physician was contacted = appropriate (ie: treatment was not required or was minimal/aligned with routine EMS interventions such as oxygen admin, positioning, fluid admin, etc.)

Type of Physician Contact

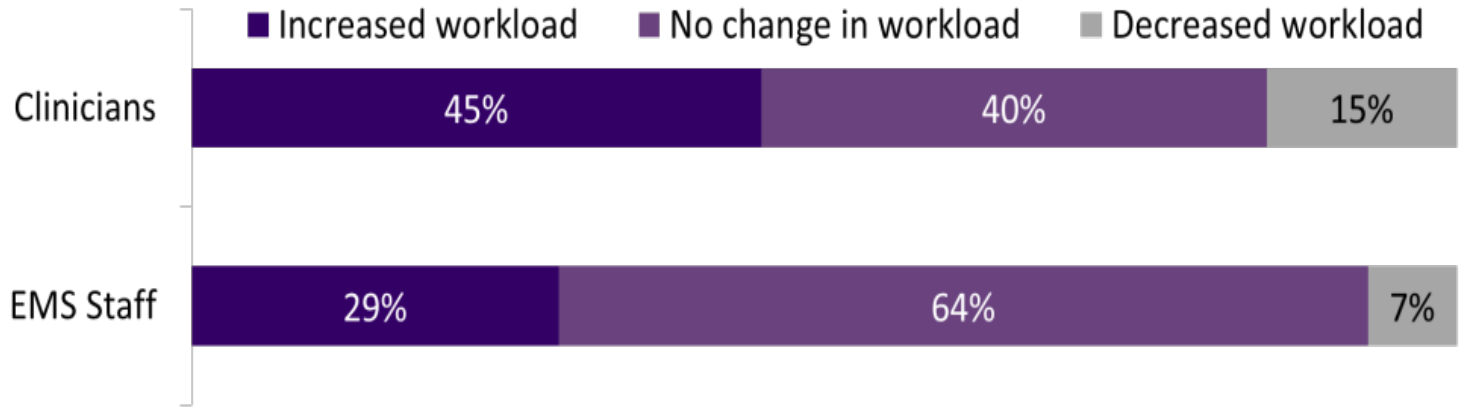


EMS Time on Task

Despite longer time on scene, the **overall time on task for EMS staff was lower** when compared to all of the EMS events where transport occurred



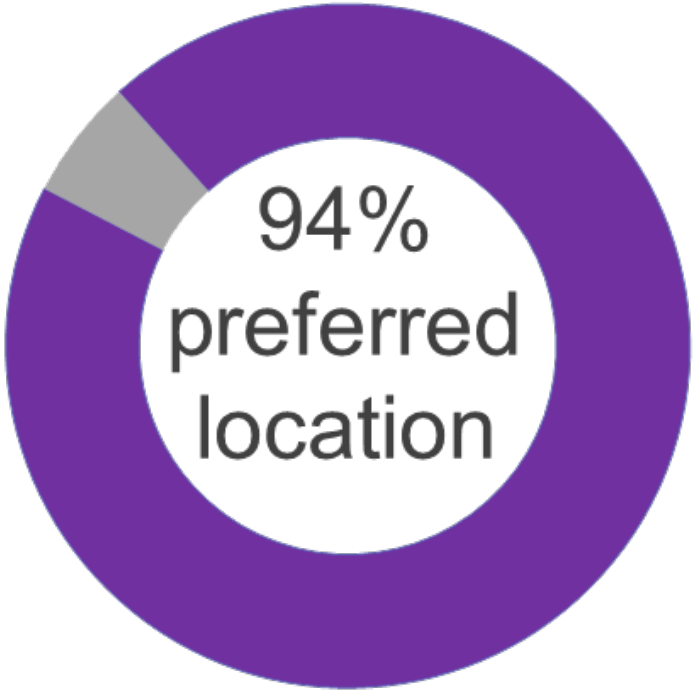
Perceived Effect on Workload



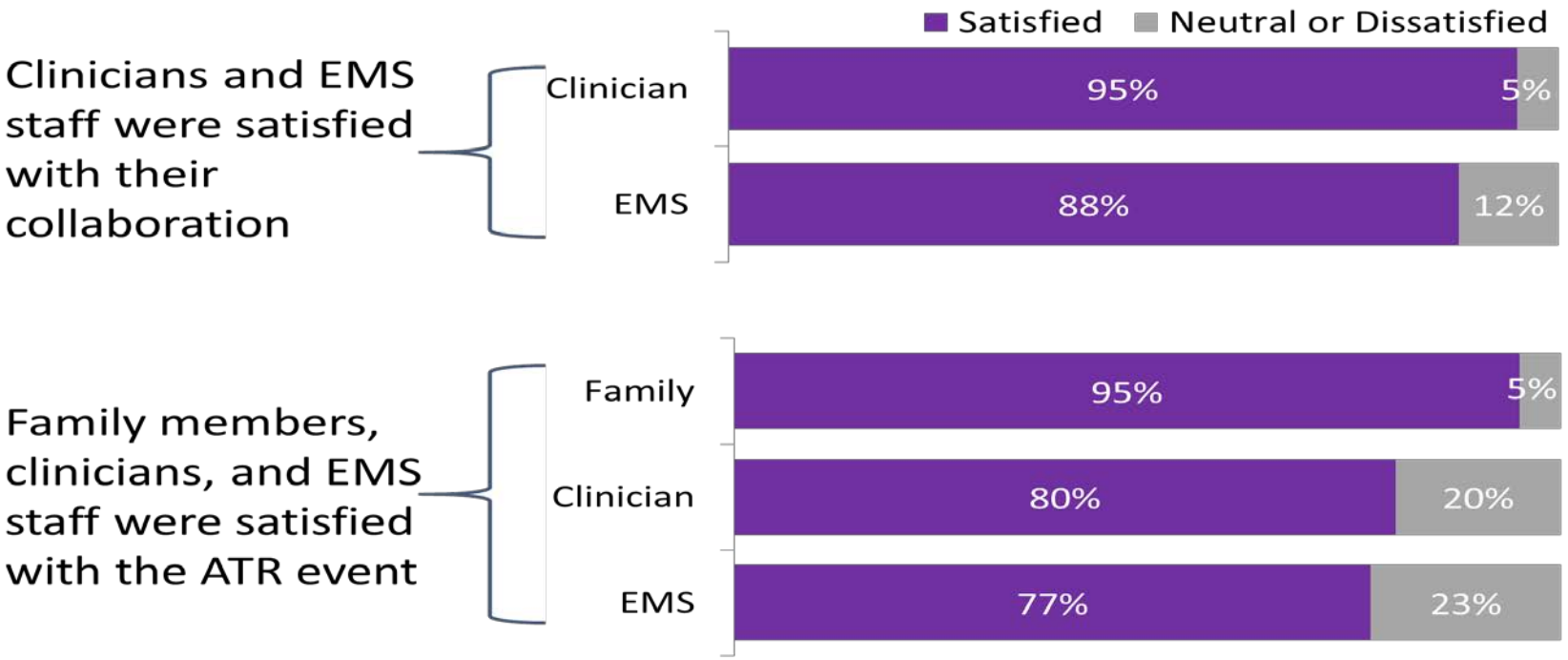
Although many clinicians and some paramedics felt the program increased their workload, **they felt that the benefit provided to the patient was worth it**

Preferred Location of Care

The majority of family members who were surveyed said that the **patient received treatment in their preferred location of care**



High Satisfaction



**** Physician experience surveys to be incorporated into Phase II evaluation (Spring 2017) ****

Questions & Comments

For more information email us!

EMS.Palliative@
albertahealthservices.ca

Or Visit the Provincial Palliative Care Website

www.myhealth.alberta.ca/palliative-care