

LAUNCH OF A COMMUNITY PARAMEDIC PROGRAM WITHIN A HEALTH CARE SYSTEM

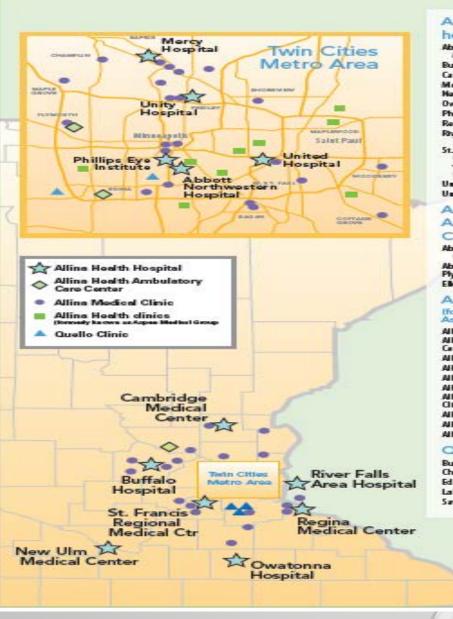
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DIRECTOR

OF CLINICAL & SUPPORT SERVICES

OBJECTIVES

- SHARE ALLINA HEALTH'S DEVELOPMENT OF CP PROGRAM
- LESSONS LEARNED
- PROGRAM RESULTS
- RECOMMENDATIONS



Allina Health hospitals

Abbett Morthwestern Hospital, Minecapolis Buffalo Hospital Cambridge Medical Center Mercy Hospital, Coon Rapids New Ulm Medical Center Owatonna Hospital Philips Eye Test tute, Minneapolis Regina Medical Center River Falls Area Hospital,

St. Francis Regional Madical Ganter, Shakopee (Jointly owned with Essentia Health Critical Access Group and Health Partners) United Hospital, St. Paul Unity Hospital, Fridley

Allina Health Ambulatory Care Centers

Abbott Northwestern's Center for Ostpatient Case, Edina Abbott Northwestern — WestHealth, Plymouth Elk Bidge Health, Elk Biver

Allina Health clinics

(formerly know as Aspen Medical Group)

Allina Health Bandana Square Cheic Allina Health Bandana Square Sleep Center Allina Health Bloomington Clinic Allina Health East Lake Street Clinic

Allina Health Highland Park Clinic Allina Health Hopkins Clinic Allina Health Inver Grove Heights Clinic

Allina Health Maplewood Clinic Allina Health University Avenue Clinic Allina Health Vadeats Heights Clinic

Quello Clinic Sites

Burnsville Chankassen Edina Lakaville Savage

Allina Medical Clinic Sites

Annandale Blains Brooklyn Park Buffalo Cambridge Chample Cokato Colon Rapids Coon Rapids: Midwest Surgery Co on Rapids: Women's Health Cottage Grove Eagan Engant Parlistew OB/GYN Elk Blyer Fortbouft. Farmington Forest Lake Friding: Bartatric Surgical Specialities Fridley: OB/GYM Spedalists Hastings: Arst Street Hastings: Hininger Road Maple Grove Minerapolis: Islas Minneapolis: Nicollet Mall Minerapolis: The Doctors Uptowe **Morth Branch Horthfield** Plymouth: WestHealth Compus Prescott Prior Lake: Crossroads Lamsey Richfield: Woodlake St. Michael St. Paul: United Medical Specialities St. Paul

Shakopee Shakopee: Crossroads — Dean Lakes Shoreview West St. Paul Woodbury



ABOUT ALLINA HEALTH

PATIENT CARE FACILITIES:

- 65 ALLINA HEALTH CLINICS
- 49 REHABILITATION LOCATIONS
- 23 HOSPITAL-BASED CLINICS
- 12 HOSPITALS
- 15 RETAIL PHARMACIES
- 2 AMBULATORY CARE CENTERS
- HOME CARE, HOSPICE, PALLIATIVE CARE OFFERINGS
- HOME MEDICAL EQUIPMENT
- EMERGENCY MEDICAL SERVICES

KEY FIGURES FROM 2016

- 27,536 EMPLOYEES
- 1,775 STAFFED BEDS
- 109,091 INPATIENT HOSPITAL ADMISSIONS
- 1.5 MILLION HOSPITAL OUTPATIENT VISITS
- 31,780 INPATIENT SURGICAL PROCEDURES
- 60,077 OUTPATIENT SURGICAL PROCEDURES
- 343,083 EMERGENCY CARE VISITS

- 15,364 BIRTHS
- 4.5 MILLION CLINIC VISITS
- 231,656 HOME HEALTH VISITS
- 146,724 HOSPICE VISITS
- 937,619 RETAIL PHARMACY PRESCRIPTIONS FILLED
- 195,666 OXYGEN/MEDICAL EQUIPMENT ORDERS
- 107,810 AMBULANCE
 RESPONSES

ALLINA HEALTH EMS

POSITIVES:

- PART OF A LARGE INTEGRATED HEALTH SYSTEM
- LARGE, EMS AGENCY WITH LARGE NUMBER OF SENIOR PARAMEDICS
- ACTIVE MEDICAL DIRECTORS
- MINNESOTA JOBS SKILL PARTNER
 GRANT FOR COMMUNITY
 PARAMEDIC TRAINING

CHALLENGES:

- PART OF LARGE INTEGRATED HEALTH SYSTEM
- COMPETITION WITH OTHER PROJECTS
- NO ESTABLISHED CONNECTION
 WITH PRIMARY CARE AND IN HOSPITAL PROVIDERS

ALLINA HEALTH-EMS

- LARGE GEOGRAPHIC AREA (URBAN, SUBURBAN, & RURAL)
- POPULATION OF 1,000,000 IN PSA
- 270 RESPONSES EACH DAY 100K/YEAR

MINNESOTA PARTICULARS

- 2011 LAW PASSED RECOGNIZING COMMUNITY PARAMEDIC CREDENTIAL
 - EDUCATIONAL REQUIREMENTS
 - EXPERIENCE REQUIREMENTS
 - AMBULANCE MEDICAL DIRECTOR RECOMMENDATION
- 2012- RECEIVED ABILITY TO BILL MEDICAID
- 2012 MINNESOTA JOBS SKILLS GRANT
 - GOAL TO TRAIN 100 CPS

ALLINA HEALTH MISSION

WE SERVE OUR COMMUNITIES BY

PROVIDING EXCEPTIONAL CARE, AS WE

PREVENT ILLNESS, RESTORE HEALTH AND PROVIDE COMFORT TO ALL
WHO ENTRUST US WITH THEIR CARE.

BUILDING OUR CASE - TRIPLE AIM 2010

Better Better Care Health Reduced Costs

VISION

WE WILL:

- PUT THE PATIENT FIRST
- MAKE A DIFFERENCE IN PEOPLE'S LIVES BY PROVIDING EXCEPTIONAL CARE AND SERVICE
- CREATE A HEALING ENVIRONMENT WHERE PASSIONATE PEOPLE THRIVE AND EXCEL
- LEAD COLLABORATIVE EFFORTS THAT SOLVE OUR COMMUNITY'S HEALTH CARE CHALLENGES

GAP ANALYSIS

		1	Zohmao	rv 2011	trat					
Click on measure name for definition information & monthly data.	Reporting Period	Allina Baseline	Year End Goal	Mnth/Qtr Goal	Allina Overall	ANW	UTD	MCY	UTY	,
Care Patient Care Integration										_
AMI Readmissions Within 30 Days % PN Readmissions Within 30 Days % HF Readmissions Within 30 Days %	11, 12, 1 11, 12, 1 11, 12, 1	10.84% 15.80% 22.16%	10.60% 15.00% 17.00%	10.78% 15.60% 20.90%	9.20 16.12 19.01	9.30 14.15 16.84	8.42 22.97 17.09	5.15 15.19 25.00	40.00 15.96 21.82	
Prevention and Wellness										
Breast Cancer Screening % Colon Cancer Screening %	1	74.9% 45.3%	78.6% 48.1%	75.8% 46.0%	75.0 49.9					
Living with Illness										
Diabetes Optimal Care % Vascular Disease Optimal Care % Hypertension % Depression (outcomes)	2 2 2 2	47.0% 46.9% 82.2% 15.3%	47.6% 47.1% 82.1% 20.0%	47.2% 47.0% 82.1% 16.5%	46.4 46.3 82.2 16.1					
Acute Care		558.00.000								
Core Measures Optimal Care Stroke Optimal Care	10, 11, 12 10, 11, 12	94.8% 69.6%	95.0% 85.0%	94.9% 73.5%	94.7 80.6	94.7 85.7	95.2 81.0	93.6 81.0	96.4 89.7	2000
End of Life										
# of Hospital Days Last 6 Months of Life	2	6.00	5.70	5.95	5.80					



Ambulatory Census Dashboard

Identified DCs/Referrals:

Selected DCs/Referrals:

277

277



Discharges/Referrals of ACO Patients in Last 7 Days

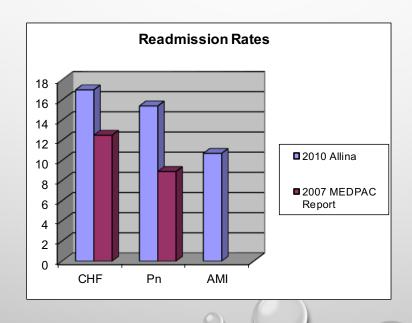
Highest Readmit Risk $^{\perp}$	Discharge Date	MRN	Currently Enrolled?	Hospital	Patient Type	Hosp. Primary Problem	DC Status		Last ACT Start Date	# ED Visits in 6 Months w/ Same Problem	>= 2 ED Visits in 6 Months	Living Situation
High			N	United	Inpatient	NSTEMI (non-ST eleva	Home Self Care	6.4	-	0	N	Home/Indepen
High			Y	Abbott	Inpatient	Closed left hip fracture	Skilled Nursing Fa	14.5	8/12/2014	0	N	Home/Indepen
High			Y	Abbott	Emerge	Chest pain	Home Self Care	0.1	8/11/2014	6	Υ	-
High			Y	Abbott	Inpatient	Effects of radiation, u	Home Health	29.4	-	0	Υ	Home/Indepen
High			Y	United	Inpatient	Acute kidney failure, u	Home Self Care	1.9	7/22/2014	1	Υ	Home/Indepen
High			Y	Mercy	Inpatient	Colitis	Skilled Nursing Fa	4.9	-	0	Υ	Home/Indepen
High			N	United	Inpatient	Acute on chronic systol	Home Self Care	2.1	5/20/2014	1	Υ	Home/Indepen
High			Y	Abbott	Inpatient	Unspecified epilepsy w	Skilled Nursing Fa	27.1	8/20/2014	0	Υ	Nursing Home
High			Υ	Mercy	Inpatient	Acute pancreatitis	Home Health	16.0	6/4/2014	0	Υ	Home/Indepen
High			Y	Abbott	Inpatient	Intervertebral cervical	Skilled Nursing Fa	7.4	8/19/2014	0	N	Home/Indepen
High			Y	United	Inpatient	Acute gouty arthropathy	Home Self Care	3.8	5/19/2014	0	Υ	Home/Indepen
High			Y	Mercy	Inpatient	Sepsis	Home Self Care	3.9	-	0	Υ	Home/Indepen
High			Y	Abbott	Inpatient	Pneumonia, organism	Home Self Care	5.3	8/19/2014	0	N	Home/Indepen
High			Y	United	Inpatient	Acute kidney failure wi	Home Self Care	5.0	7/22/2014	0	Υ	Home/Indepen
High			Y	United	Inpatient	Hemorrhage of gastro	Home Self Care	6.3	8/11/2014	0	N	Home/Indepen
High			Y	Abbott	Observa	Olecranon bursitis	Skilled Nursing Fa	0.8	8/18/2014	0	Υ	Nursing Home
High			Y	River Falls	Inpatient	-	Home Self Care	0.9	5/27/2014	0	Υ	Home/Indepen
High	-		Y	Abbott	Inpatient	Confusion	* Still Admitted *	0.7	8/19/2014	0	Υ	Home/Indepen
High	-		N	Abbott	Inpatient	Hyperkalemia	* Still Admitted *	0.9	5/21/2014	0	Υ	Home/Indepen

HOW CAN WE...

- CONTRIBUTE MORE TO THE ORGANIZATION?
- FULFILL OUR MISSION?
- PROVIDE BETTER CARE FOR OUR PATIENTS?
- DEVELOP A CAREER TRACK FOR PARAMEDICS?

COST OF READMISSIONS

OVER \$7,000 PER READMISSION IN ADDITION TO THE STRESS IT PLACES ON PATIENTS AND FAMILIES.



SMALL TEST OF CHANGE

- PARTNERED WITH RURAL HOSPITAL WITH HIGH READMISSIONS AND NO STAFF FOR FOLLOW UP
- PRIOR TO CERTIFICATION FOR CPS
- TEACHING CARE MANAGEMENT STAFF ABOUT OUR CAPABILITIES
- COMPETENCIES





- READMISSIONS
 - TRANSITION CARE MANAGEMENT
 - GEOGRAPHIC CHALLENGES
 - STAFFING CHALLENGES
- EMS TO THE RESCUE
 - PARAMEDIC OUTREACH PROJECT
 - ON-DUTY STAFF POSITIONED TO ASSIST
 - SMALL POPULATION

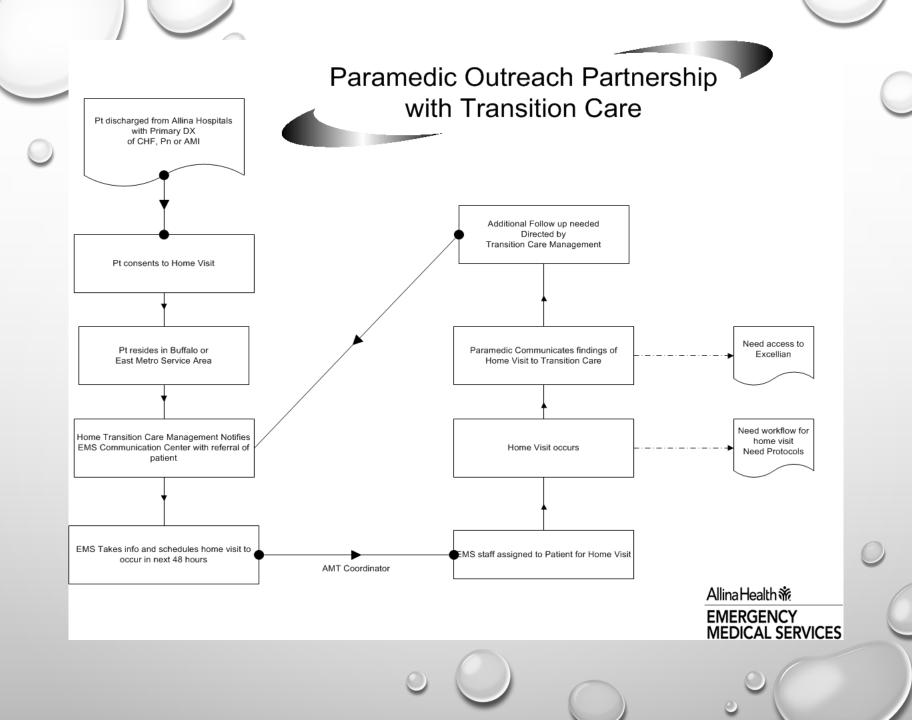


PARAMEDIC OUTREACH PARTNERSHIP PROJECT

- SELECTION
- TRAINING
- CARE MANAGEMENT RN
- PRIMARY CARE
- SOCIAL WORKERS / CASE MANAGERS

POPP PILOT

- TRAINED 4 PARAMEDICS TO PROVIDE HOME VISITS
 - SPECIFIC TASKS BASED ON TRANSITION CARE STEPS
- SMALL POPULATION
 - 4 PATIENTS IN 30 DAYS
 - PATIENT SATISFACTION EQUALED OR EXCEEDED RN VISITS
- IN LOWER VOLUME LOCATION, COULD USE ON-DUTY RESOURCES
 WITHOUT DETRIMENT TO 911 RESPONSE





- HOME VISITS COMPLETE WITHIN 48 HOURS OF REFERRAL
- PATIENT SATISFACTION
- SYSTEM WIDE MEASURES OF READMISSIONS



CHALLENGES

- SMALL POPULATION BASE
- 4 PARAMEDICS INVOLVED / SCHEDULING
- DOCUMENTATION CHALLENGES

DOCUMENTATION CHALLENGES

CHF Home Visit - Paper form

	Question	Possible answers		
	Location of Assessment	Home Clinic Cardiac Rehab Other(specify in note)	2	
Discharge Information	Hospital Discharge Date			
	Hospital Discharged From (type in the name of the hospital)			Post at the
	Number of days between discharge and home visit	5	Potent's Fill Heat-Falue Condition	Heart Fallure
	Pulse	0	in Excellian, when you click the cascade icon, a window opens so that you can select	
	Blood Pressure		the Heart Fallure group and add it to the	
	Arm	Right arm or Left arm	flowsheet.	
		0.00	Heart Fallure Questions on paper:	Yes or No
	BP Position	Sitting Standing Lying down	Do you have a scale?	Yes or No or N/A
9	Respirations	_	Scale Provided?	TES OF NO OF N/A
	\$pO2	_	Discharge Weight (enter weight)	
Vitals	O2 (LPM)	1 2 4 6	Today's weight	
	2237227	1:3703 D	Are you weighing daily?	Yes or No
	O2 Device	Cannula Mask Other	Are you writing down your weight daily?	Yes or No
	Lung Sounds	Bilateral Clear Bilateral Crackles-Coarse Bilateral Crackles-Fine Bilateral Rhonchi	Do you know when to notify your doctor of a weight gain? (3 lbs in 1 day; 5lbs in 1 week)	Yes or No
		Bilateral Diminished Bilateral Wheeze Respiratory Left Crackles Coarse Left Crackles Fine Left Rhonchi Left Diminished Left Wheeze Respiratory	Name 2 foods low in salt that you can eat	Chicken Fish Fresh fruit Low Sodium Vegetables
		Right Crackles Coarse Right Crackles Fine Right Rhonchi Right Diminished Right Wheeze Respiratory	Name 2 foods high in sait that you should avoid	Canned Food Processed Food Processed Meat Table Salt
		Unable to assess Other	Diet education provided today	Yes or No
		Other	Which of the following symptoms are you experiencing?	Chest Pain Confusion Denies any pain Dry, hacky cough Dyspnea Dyspnea on exertion Fatigue Foot and ankle swelling or edema inability to lile flat Persistent cough Pink tinged philegm Short of breath Sleep sitting up in chair Struggling to breath



- GOAL TO TRAIN 100 PARAMEDICS FROM 3 EMS SYSTEMS
 - 312 HOUR PROGRAM
 - 196 HOURS OF CLINICALS
- CLINICAL NEEDS PROVIDED OPPORTUNITY TO EDUCATE HOSPITAL & PRIMARY CARE PROVIDERS
- HELPED IDENTIFY NEW OPPORTUNITIES / GAPS

Clinical sites

- CARDIOVASCULAR
- RESPIRATORY
- HOSPICE
- SENIOR CARE TRANSITIONS
- COMMUNITY
 OUTREACH

- HOME CARE
- BEHAVIORAL HEALTH
- DIABETIC EDUCATORS
- CARE MANAGEMENT
- PRIMARY CARE
- WOUND CARE

CP IMPLEMENTATION - SEPT 2013

- ACCOUNTABLE CARE ORGANIZATION
 - FOCUS ON BEHAVIORAL HEALTH PATIENTS
- HOSPITAL READMISSIONS
 - HIGH RISK PATIENTS
- EXPANDED TO FREQUENT ED USERS 2014

HOME VISITS

- COMPLETE MEDICATION RECONCILIATIONS
- PERFORM A HOME SAFETY ASSESSMENT
- ADDRESS ANY CONCERNS OF REFERRING PROVIDER MAY BE TAKING WEIGHTS OR OTHER VITALS
- REVIEW NUTRITION
- HELP CONNECT PATIENT AND FAMILY TO RESOURCES THEY MAY NEED (MAY REFER TO HOME CARE, ETC)
- TRANSPORT TO APPOINTMENTS LIMITED TO BH PATIENTS

Community Paramedic Post-Hospital Discharge

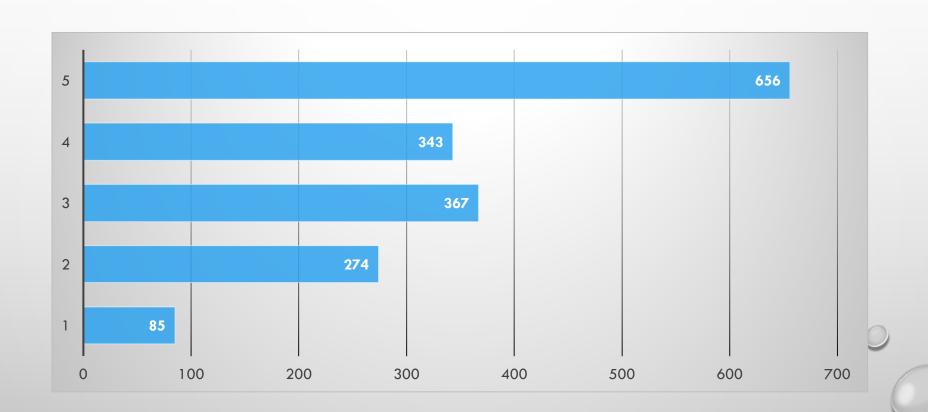
General Home Visit Checklist

Community Paramedic	Location of Assessment:
Patient Name:	MRN:
Primary Care Provider:	Clinic Location:
Discharge Information	
Hospital Discharge Date: Hospita	al:
Discharge Diagnosis:	
Vital Signs (if applicable):	
Pulse: Blood Pressure	Resp Sp02 O2
Medication Review	
Current Medications:	
New Medications:	
Barriers to taking medication:	
Review of Medication Instructions Completed:	□ Yes □ No Comments:
Daily Activity Review- Indicate Presence of Con	ncern:
☐ Yes ☐ No Understanding of Illness	Comments:
□ Yes □ No Independence	Comments:
□ Yes □ No Finances	Comments:
☐ Yes ☐ No Nutrition	Comments:
□ Yes □ No Safety	Comments:
□ Yes □ No Vulnerability	Comments:
□ Yes □ No Environment	Comments:
□ Yes □ No Smoking	Comments:
Action Summary	

INITIAL RESULTS

- 22 PATIENTS WITH ↑ PREDICTION OF READMISSION AND FREQUENT ED USE
 - 1 READMISSION AT DAY 36 97.2% SUCCESS RATE
 - 1 READMISSION AT DAY 45
- HIGH UTILIZATION ER
 - 78% PATIENTS DID NOT HAVE A RETURN VISIT TO THE ER WITHIN 30 AFTER THEIR HOME VISIT.

CP VISITS 2013-2017 (JAN-SEP)



Most patients agree that it is helpful to meet with a community paramedic. (n = 50)



0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

EXPANSION OPPORTUNITIES

- CARDIOLOGY PATIENTS
- EXPANDING CARE MANAGEMENT
- DIABETES PATIENTS
- AFTER VISIT DECREASING LOS

RECOMMENDATIONS

- WHAT IS YOUR BUSINESS PLAN? CREATE THE DOCUMENT!
 - DO YOUR GAP ANALYSIS
 - WHERE CAN YOU HAVE IMPACT
 - WHO ARE THE STAKEHOLDERS
 - GET THEM ONBOARD EARLY
- WHAT ADDITIONAL TRAINING DO YOUR PARAMEDICS NEED?
- METRICS/DATA
 - HOW WILL YOU MEASURE SUCCESS?

GOOD LUCK IN DEVELOPING YOUR PROGRAMS!



Community Paramedic Programs