Moon Hugo Health

Hayden Mills
haymills@indiana.edu

TABLE OF CONTENTS

<u>EXECUTIVE SUMMARY</u>

Moon Hugo hospice care software involves designing and developing a hospice and palliative care software that allows hospice staff (hospice nurses and administration) to work easier together. The goal is to provide a solution that allows hospice staff to take better care of their patients on a daily basis. Current software solutions for the hospice industry lack efficiency and are not designed for the end users using the product which is the nurses and hospice professional staff. The specific pain points Moon Hugo software will be solving is the admissions process, the initial patient assessment, the hospice daily calendar, and the communication between the family and hospice primary care nurse.

THE BUSINESS CONCEPT

Moon Hugo hospice software will solve the current pain points in hospice agencies across the country. Currently, most hospice agencies in the US are using outdated, unreliable, and inefficient software solutions that have not been designed with the end user in mind. The current hospice software on the market does not help the nurses, physicians, social workers, chaplains, and volunteers working in hospice better care for their patients. These hospice workers simply want to provide the best care they can to the hospice patient and their family. The current software solutions do not allow them to do this to the best of their ability.
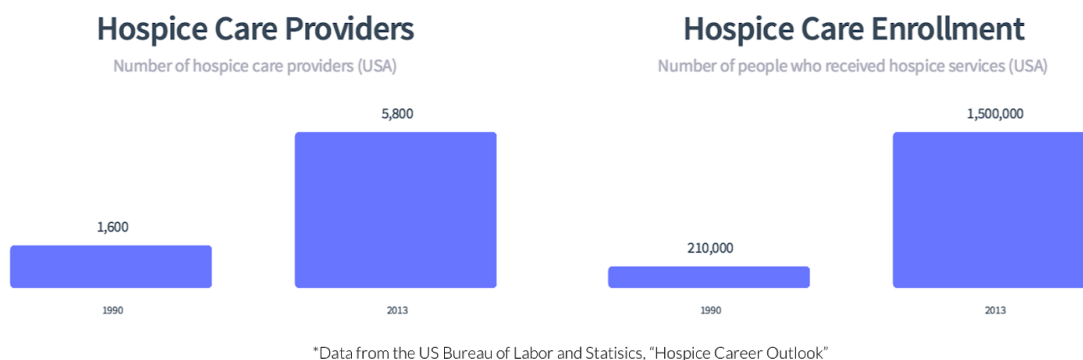
The software product that I have designed and have started testing with hospice agencies in Southern Indiana solves four major pain points in the daily hospice workflow.

1) **Admissions process** - Hospice secretaries and social workers need a simple way to admit new hospice patients into the system once receiving information from the patient's family doctor.
2) **Initial patient assessment** - Hospice Assessment Nurses need a usable feature that allows them to easily chart the patient's condition during the first initial visit to the home
3) **Patient and hospice worker calendar** - Hospice agencies run on a strict calendar of ordering patient medication, scheduling patient home visits, chaplain visits, etc. This calendar needs to be user friendly and accurate at all times
4) **Communication between primary care nurse and patient's family** - Throughout their loved ones time in hospice, hospice patient families need to be in constant contact with the hospice nurse assigned to their home

[According to the NHPCO](), most people working in the hospice industry are between 30 and 55 years old. Hospice is a female dominated industry with well over 85% of the workers being female. The target users of Moon Hugo software will be the nurses, physicians, social workers, chaplains, and volunteers who work daily taking care of hospice patients and their family. However, the target customer are non-profit and for-profit hospice agencies in the US. These agencies typically have executive teams who make the decision on the software their hospice agency will use. Depending on the size of the agency the software decision sometimes can affect hundreds of hospice agencies across many state lines.

INDUSTRY/MARKET ANALYSIS

According to the US Bureau of Labor and Statistics, hospice and home health care in the United States will continue to drastically rise past 2030, as the "baby boom" generation requires more and more elderly care and supervision.

Hospice Care Providers
Number of hospice care providers (USA)

5,800

1,600

1990   2013

Hospice Care Enrollment
Number of people who received hospice services (USA)

1,500,000

210,000

1990   2013

*Data from the US Bureau of Labor and Statisics, "Hospice Career Outlook"

Moon Hugo has a plan of entering the market as a full service hospice care software solution that addresses the needs of the end user (hospice professionals) and designs solutions that ensures the best patient care. Our software will be licensed and sold nationwide to nonprofit and for-profit hospice agencies looking to save time in their current daily workflow.

The plan to penetrate the current hospice software market is to design and build a MVP product to license to a small to mid-size hospice agency in the Midwest. The intention would be to work closely with this hospice agency to work out different design issues as they arise. After the software has been thoroughly tested the software will begin to be licensed out to hospice agencies across the US. The software will be marketed through a grassroots social media campaign that demonstrates to prospective hospice agency decision makers how Moon Hugo hospice software has saved agencies across the US time, resources, and money. This campaign will show short videos of hospice professionals giving testimonials of how our software has improved their workflow and allowed them to provide better patient care.

Current competitors in the hospice software market include: Mumms, Kinnser, AllScripts, Cerner, and Epic. The current competitors in the market are legacy healthcare software providers who do not provide direct hospice care software

designed for the end users making this an opportune time for a new software company to enter the market who focuses on the end user and how their real workflow needs.

MANAGEMENT TEAM

Hayden Mills - Moon Hugo Founder and Lead Designer
Hayden is in charge of the daily operations of Moon Hugo and its user centered design.

Eric Arnold - Moon Hugo Backend Developer
Eric will be in charge of the backend development of the Moon Hugo software once initial design prototypes have been tested and feedback has been implemented into the design.

Dr. Sarah Tieman of IU Health - Mentor
Dr. Tieman is available for overall information in the healthcare technology space and feedback regarding the design and implementation into hospice agencies around the Midwest. Dr. Tieman is currently involved in palliative care at IU Health in Bloomington, IN.
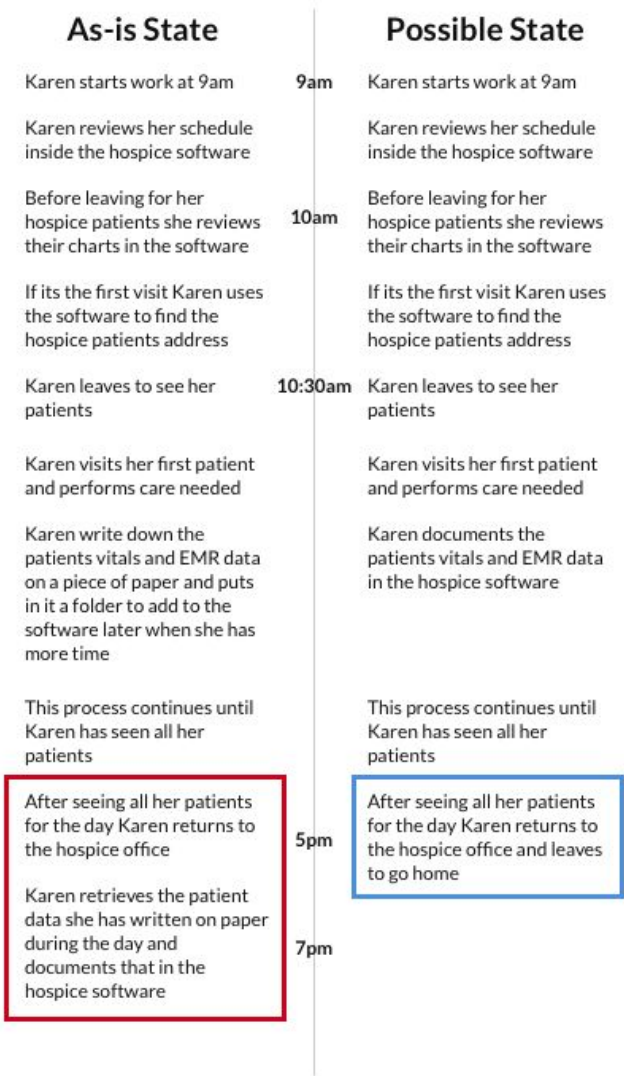
Nurse Deb Smith of IU Hospice - Mentor
Nurse Deb is a crucial member of the team who provides honest feedback on the software design. She has over 30 years experience as a hospice nurse and manager at IU Health and Hospice in Bloomington, IN.

PRODUCT DEVELOPMENT ANALYSIS

Karen Williams
Gender: Female
Age: 41 years old
Profession: Hospice Nurse at Kansas Hospice Care
Education: BS in Nursing from Kansas State
Salary: $65,000
Location: Topeka, Kansas

As-is State

Time	
9am	Karen starts work at 9am
	Karen reviews her schedule inside the hospice software
10am	Before leaving for her hospice patients she reviews their charts in the software
	If its the first visit Karen uses the software to find the hospice patients address
10:30am	Karen leaves to see her patients
	Karen visits her first patient and performs care needed
	Karen write down the patients vitals and EMR data on a piece of paper and puts in it a folder to add to the software later when she has more time
	This process continues until Karen has seen all her patients
5pm	After seeing all her patients for the day Karen returns to the hospice office
7pm	Karen retrieves the patient data she has written on paper during the day and documents that in the hospice software

Possible State

Time	
9am	Karen starts work at 9am
	Karen reviews her schedule inside the hospice software
10am	Before leaving for her hospice patients she reviews their charts in the software
	If its the first visit Karen uses the software to find the hospice patients address
10:30am	Karen leaves to see her patients
	Karen visits her first patient and performs care needed
	Karen documents the patients vitals and EMR data in the hospice software
	This process continues until Karen has seen all her patients
5pm	After seeing all her patients for the day Karen returns to the hospice office and leaves to go home

Top priority = saving time when charting daily patient data

Our persona is Karen, a hospice primary care nurse. Her top priority at work is providing the best patient care possible. This directly correlates with the amount of time she gets to spend with each hospice patient and their family. Moon Hugo, our hospice care software solution, directly address this top priority by allowing Karen to chart faster during the day allowing her more time to see each patient and do what she loves and feels called to do: care for the patient. Karen doesn't care about the fancy design of the software she uses she just wants it to work and get out of the way in order for her to do her job to the best of her ability.

For hospice agencies this time saving software will save them money because nurses and hospice care professionals like Karen will be more efficient charting and getting the necessary things done faster. Also, hospice workers will be able to focus more on the patient and patient's family resulting in a better patient experience.

FINANCIAL ANALYSIS

According to Debt.org, Medicare pays on average $146.63 per day for hospice care in the US. The average length stay for a hospice patient is 72 days (NHPCO). Based off these numbers the average cost of a hospice patient paying with Medicare is $10,557.

Hospices range in size from small all-volunteer agencies that care for fewer than 50 patients per year to large, national corporate chains that care for thousands of patients each day. One measure of agency size is total admissions over the course of a year. In 2013, 78.7%1 of hospices had 500 or fewer total admissions (NHPCO). Using 500 as the average amount of patients a hospice agency cares for in a year, the total amount of revenue made is $5,250,000.

The plan would be to sell the hospice software for $200,000 per year to an average sized hospice agency in the US.

TAM = # of end users x # of revenue each end user is worth per year

10,500,000,000 = 200,000 (# of full time hospice workers) x 35,000 (average hospice worker salary)

Or

6,000 (estimated hospice agencies in the US) x $250,000 (average yearly cost of hospice software) = 1.8 billion

*numbers based off yearly averages from the Bureau of Labor and Statistics

TIMELINE

| Initial Investment Raised by August 2016 | Design and test prototypes and make changes based on real user feedback | MVP Start Development and Continue User Testing | MVP Product Developed and Launched at Midwest Hospice Agency |

Summer 2016 — Summer 2017

BIBLIOGRAPHY

- National Hospice and Palliative Care Organization (http://www.nhpco.org/)
- US Bureau of Labor and Statistics (http://www.bls.gov/careeroutlook/2015/article/hospice.htm)
- "The Business of Dying" by Washington Post (http://www.washingtonpost.com/sf/business/collection/business-of-dying/)