REVIEWING THE PHC WORKFLOW IN IMPROVING THE QUALITY OF US HEALTHCARE

Dissertation Submitted to

The IIHMR University, Jaipur

for the partial fulfillment for the award of the degree

ofMaster of Business Administration (MBA)

in

Hospital and Health Management by

Poojya Khanna

Under the Supervision and Guidance of

Dr Monika Chaudhary
Assistant Professor
IIHMR UNIVERSITY, JAIPUR

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DECLARATION BY STUDENT

I hereby declare that this dissertation titled **Reviewing the workflow of physician housecalls (physician group) in improving the quality of US healthcare** is the bonafide record of my original researchwork. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published or unpublished workof others has been duly acknowledged in the text.

Poojya Khanna

26 May 2023

CERTIFICATE

This is to certify that Poojya Khanna, in partial fulfillment of the requirements for the award of the degree of MBA (Hospital and Health Management) from the IIHMR University, Jaipur has successfully completed her internship at The Phoenix Compliance. During March 20, 2023, to June 20, 2023.

Place: Bareilly

Date: June 20, 2023.

Mr. Vivek Kushal

CEO of Phoenix Compliance

Phoenix Compliance

CERTIFICATE

This is to certify that dissertation titled **Reviewing the workflow of physician housecalls (Physician group) in improving the quality of US healthcare** is a record of the research work undertaken by Poojya Khanna in partial fulfillment of the requirements for the awardof the degree of MBA (Hospital and Health Management) from the IIHMR University, Jaipur under my guidance and supervision and her approach to the research study has been sincere, scientific, and analytical.

Dr Monika Chaudhary
Assistant professor & Faculty Guide
IIHMR University, Jaipur
Date

Dr (Col) Mahender Kumar
Dean IIHMR
IIHMR University, Jaipur
Date

ACKNOWLEDGMENT

I received a great chance to study and advance professionally thanks to the dissertation opportunity I had with Phoenix Compliance. I am also appreciative of getting to know so many amazing individuals who helped me get through this dissertation phase.

To show my heartfelt gratitude to Mr. Vivek Kushal, particularly for the time he devoted to listening and giving me advice despite being exceptionally busy with tasks, I'd like to make use of that opportunity to complete my dissertation.

I would like to thank, from the bottom of my heart, Prof. Monika Chaudhary, assistant professor, and mentor at IIHMR University who helped me with this project by giving me a lot of important advice and guidance. In this time of need, I chose to thank them for their assistance.

I'm seeing this opportunity as a turning point in my career. I will try to use this new knowledge and information in as efficient a manner as possible, while further strengthening it, so that I can meet the career goals set for me. I'm hoping to work with each of you once more in the future.

Sincerely,

Poojya Khanna

MBA HM

ABSTRACT

The purpose of Physician Housecalls is to provide for the requirements of patients who are housebound. They exist to provide care for people in their homes, where they are most at ease and most vulnerable. Thereby giving everyone access to the assistance they require for a healthier and more contented life.

Currently, their focus is caring for the ever-growing geriatric population in the USA. Most of this population have a substantial care problem since they can't get to the doctor because of transportation and mobility issues. They go a step further by collaborating with home health agencies, hospice agencies, mobile lab & x-ray services, and many other organizations to make sure patients have the assistance they require to continue living comfortably at home.

Doctor alliance enters the picture to achieve the goals of physician housecalls and to provide patients with high-quality care. They offer free accounts to all agencies and their doctors so they can get going. They interface with any EHR, allowing for automatic distribution of all PHC papers with no more faxing or printing.

Every physician receives every document automatically. For the CPO, CCM, and TCM services that PHC has been performing, Doctor alliance handles the billing. They bill for documents more quickly than ever and track them in real-time. Documents made more physician-friendly to boost patient referrals.

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INTRODUCTION

A health system, in the words of the World Health Organisation, is comprised of all institutions, individuals and activities which have an overriding goal of advancing, revitalizing, or maintaining health. This is accompanied by more indirect health improvement measures, as well as initiatives aimed at changing the determinants of health.

With over 330 million inhabitants, the U.S. is one of the most comprehensive healthcare systems in the world. This is based on interconnected interactions between healthcare providers, payers and patients who are receiving care. Health care in the United States includes both public and private providers being integrated into insurance plans.

Two significant health care programs are under government control: Medicaid, providing coverage to low-income individuals; and Medicare, for those above 65 years of age with special needs. Although many people receive coverage through their work, private insurance is also commonly used. Even though the US healthcare system has despite being the most expensive in the world, not always deliver better health outcomes than other industrialized countries.

The United States is a global leader in healthcare innovation, with many of the world's most cutting-edge medical technologies and treatments originating such as Precision Medicine, Telemedicine, Electronic Health Records, Artificial Intelligence (AI), and Wearable Device.

Fig 1.1 American Healthcare System

To better understand how the American health care system works efficiently, multiple terms are explained -

1. **Physicians Group -** A physician group is one or more physicians who are part of a healthcare organization that provides care. These could be private practices, in which a single physician has an office and manages the practice itself or collective practices where there are two or more physicians taking care of patients at one facility. Depending on the kind of care that each physician provides, group practices may be classified as a single or multiple specialty.

2. **Ancillary Services -** These include support or diagnostic services aimed at assisting primary care doctors, nurses, and other healthcare professionals to treat patients. An ancillary service may be encountered in hospitals, clinics, or standalone diagnostic laboratories. In addition, for the provision of ancillary services, a patient may need to visit another location.

A few instances of supplementary services include:

- DME, or delivered medical equipment, is an acronym. This organization is used to deliver medical equipment needed for the patient's treatment at the doctor's request.
- HHA - Home health agency in this service, nursing staff is given to the patient who is confined to their house in order to provide them with high-quality care.
- Hospice - Patients with terminal illnesses, such as cancer, are given nursing care.
- Sleep Study - Patients with sleeping disorders are monitored in laboratories.
- EHR, or electronic health records are a digital record of the patient's medical history. medical history, which contains details about their illnesses, prescription drugs, and other information.

3. **Care plan oversight -** In order to supervise the care of patients being treated by various healthcare institutions, health professionals are offering Care plan Oversight CPO services. The goal of CPO is to make sure that the care is coordinated, thorough, and satisfies the patient's needs.

The activities which are usually included in the CPO are as follows:

- In order to address the patient's needs in relation to his or her health care, societal and psychological needs, a comprehensive plan of care should be developed.
- After completing an episode, a patient is recertified for another 60 days, and the cycle repeats again. However, the patient must be engaged in terms of face-to-face interactions.
- A periodic review and updating of the patient care plan to ensure that it is current and appropriate in view of patients' evolving needs.
- Care coordination among various healthcare professionals, such as doctors, nurses, therapists, and other experts.
- Tracking the patient's development and response to treatment and modifying the care plan as necessary.
- Informing the patient and their family of any changes to the care plan and the plan itself.

4. **Chronic care management -** Chronic Care Management refers to the long-term care for patients with chronic medical conditions such as diabetes, heart disease and COPD among others. To achieve the goal of improving patient health outcomes, CCM uses a team focused approach when controlling patients' symptoms and reducing their likelihood of problems.

   The aim of chronic disease management is to improve patient outcomes, reduce emergency room and hospital admissions rates, increase patients' involvement in their own care and strengthen collaboration and coordination between healthcare professionals.

   A variety of treatments may be part of the CCM including medication management, regular visits with healthcare professionals, patient education, and support to make good use of your own health care, as well as coordinated care between different hospital systems.

   In order to provide comprehensive and co-ordinational treatment for patients with chronic diseases, primary care physicians, nurse practitioners, chemists etc. are often employed as a team of healthcare professionals. In improving outcomes for patients and reducing health expenditure related to chronic disease, it has been shown that this approach of care based on team collaboration is successful.

5. **Revenue cycle management -** United States of America healthcare systems and throughout the world are using a revenue cycle management approach called RCM, which tracks patients' revenues from their first visit or interaction with health system up to the last payment of any outstanding amount.

   It is an expected component of health administration. All administrative and clinical functions that contribute to the capture, control, or recovery of revenue from patients' services is a term used in the Revenue Cycle. The cycle is a pattern that documents and explains the patient's life course at every stage of his or her healthcare journey, including admission to final payment.

   Some of the billing codes used to bill patients are –

   - **G0179 –** Recertification of patient.
   - **G0180 –** Certification of patient.

- **G0181 –** 30 min supervision provided while availing services from home health agency.
- **G0182 -** 30 min supervision provided while availing services from hospice.

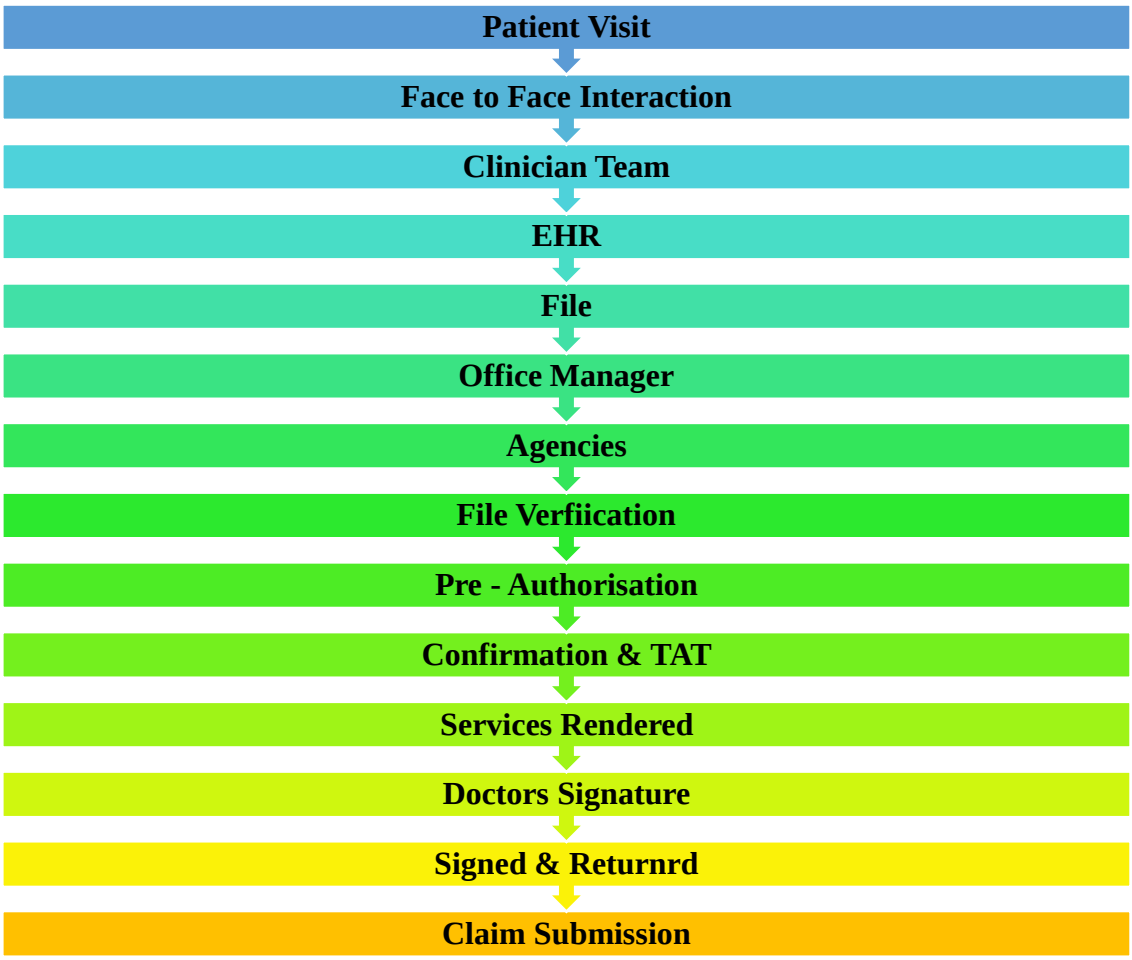

Fig 1.2 Patient Journey

LITERATURE REVIEW

S.NO.	ARTICLE	YEAR	AUTHOR	OBJECTIVE	FINDINGS
1.	Envisioning a Better U.S. Health Care System for All: Coverage and Cost of Care.	2020	Ryan Crowley, BSJ, Hilary Daniel, BS, Thomas G. Cooney, MD, and Lee S. Engel, MD.	• Attain an aim of ensuring a more equitable health system, where everybody has access to and is subject to the care, they need at reasonable costs for both themselves and society as a whole.	• There are more than 30 million people who don't have health insurance, many millions of others under insured and this number is expected to increase. • Patients should have appropriate access to a doctor, hospital or another source of treatment and the coverage should not be based on their physical location, professional status, or income. It can be achieved by means of a single payer funding model, or with publicly subsidized coverage.
2.	Group practice impacts on patients, physicians, and healthcare systems: a scoping review.	2021	Terry Zwiep, San (Hilalion) Ahn, Jamie Brehaut, Fady Balaa, Daniel I McIsaac, Susan Rich, Tom Wallace, and Husein Moloo.	• The aim of this longitudinal prospective study is to measure the Group practices as they have both positive and negative impacts on patients, healthcare professionals and health systems.	• This will result in fewer emergency departments and outpatient resources being used by patients with various chronic conditions who perceive increased integration from the physician group. • Patients' safety, effectiveness, access to therapy, thoroughness, waiting time and the number of hours invested into a patient were found to be enhanced by group practice. • Patients were of the opinion that group practices offered better care in terms of infrastructure, equipment, reliability, responsiveness, and empathy. • Greater deterioration in patient continuity of care and reduced doctor relationship were the negative effects. • Moreover, it has been demonstrated that if financial incentives were granted to group practices, they would request further investigations or control of care in an inappropriate manner.

3.	**Factors associated with homecare coordination and quality of care: a research protocol for a national multi-center cross-sectional study.**	**2021**	**Nathalie Möckli, Michael Simon, Carla Meyer-Massetti, Sandrine Pihet, Roland Fischer, Matthias Wächter, Christine Serdaly & Franziska Zúñiga.**	**This study intends to investigate the relationship between coordination of care at agency level and a high standard of patient care, as well as how system and organizational-level factors affect agency-level homecare coordination.**	• **Government and policy choices take place at macro level, businesses such as home care companies are operated at meso level; interactions between customers' workers in the healthcare sector takes place at micro level. Care coordination may be compromised at any of these levels.** • **Because homecare employees often encountered difficulties in accessing health information, they had to use a larger proportion of the time than planned. It also referred to the frequent use of nursing assistants who have fewer qualifications and training as a base for home care nurses' decisions.** • **Effective care coordination, which has resulted in reduced hospitalizations, increased levels of customer satisfaction and improved health outcomes, can achieve greater quality of care.**
4.	**Clinical Outcomes and Quality of Life of Home Health Care Patients.**	**2013**	**Suk Jung Han PhD, RN, Hyun Kyung Kim PhD, RN, Judith Storfjell PhD, RN, FAAN, Mi Ja Kim PhD, RN, FAAN.**	• **In this study, the quality of life (QOL) of patients receiving home health care was assessed in relation to how their health status changed over the course of their care, or 60 days, after they started receiving it.**	• **Elderly patients aged 65 years and older accounted for 70.5% of the patient population, although all age groups had access to home health care.** • **The effectiveness of home health services is assessed using the OASIS method. This is a 79-item tool to allow collection of outcome data. The results may be used for future remuneration and implementation of outcome linked quality improvement.** • **Users of home health care saw a larger a continuous scale based on the quantity and make-up of ADL and IADL before and after hospitalization shows that users have improved in their functional state compared to nonusers.**

RESEARCH METHODOLOGY

- **RESEARCH QUESTION:**

1. What is the current process of preparing orders and QC validation of errors?
2. What is the process of uploading conversations and signed documents on EHR?
3. How is CPO captured by care coordinators?
4. Analyzing the total number of patients are billable and efficiency of care provided to the patient?

- **OBJECTIVES:**

1. To evaluate the impact of the current management process on the care coordination provided to the patient.
2. Determine the errors which are affecting the efficiency of care provided to the patient.
3. Recommend improvements to the current process management.
4. Examine the handling of errors and discrepancies occurring during the workflow.

- **RESEARCH METHODOLOGY:**

This work is based on Quantitative analytical study in doctor alliance, for the purposes of observation studies, convenient sampling is used. The research lasted three months, given the sample size of 1000 patients and 198 home health agencies.

Time of observation was when patient orders and conversations start inflowing till capturing of CPO minutes from 08 am to 5 pm CST (except Saturdays & Sundays) as no inflow of orders takes place during this period.

- **Inclusion criteria:** PHC patient base and home health agency of Oklahoma and Texas.
- **Exclusion criteria:** Patient who are not eligible for care plan oversight due to expiration of episode, deceased and no face-to-face encounters within 6 months.

- **Source of data collection:**

Data was collected directly from the doctor's alliance back office and electronic health record (Athena) of patients with a timeframe of 10 April – 16 May. The data was collected by observing various workflows performed by the care coordinators. Interaction with other care coordinators also gives an insight into the quality of care provided to the patient. The responses obtained were collected, filtered, and statistically analyzed using tools like Microsoft Excel.

WORKFLOW

- In order to provide care coordination a workflow has been followed from extracting patient list form EHR to 30 minutes care coordination.
- Various steps such as order preparation, conversation uploading, signed documents uploading and CPO capturing have their own set of workflows to achieve the desired outcomes.

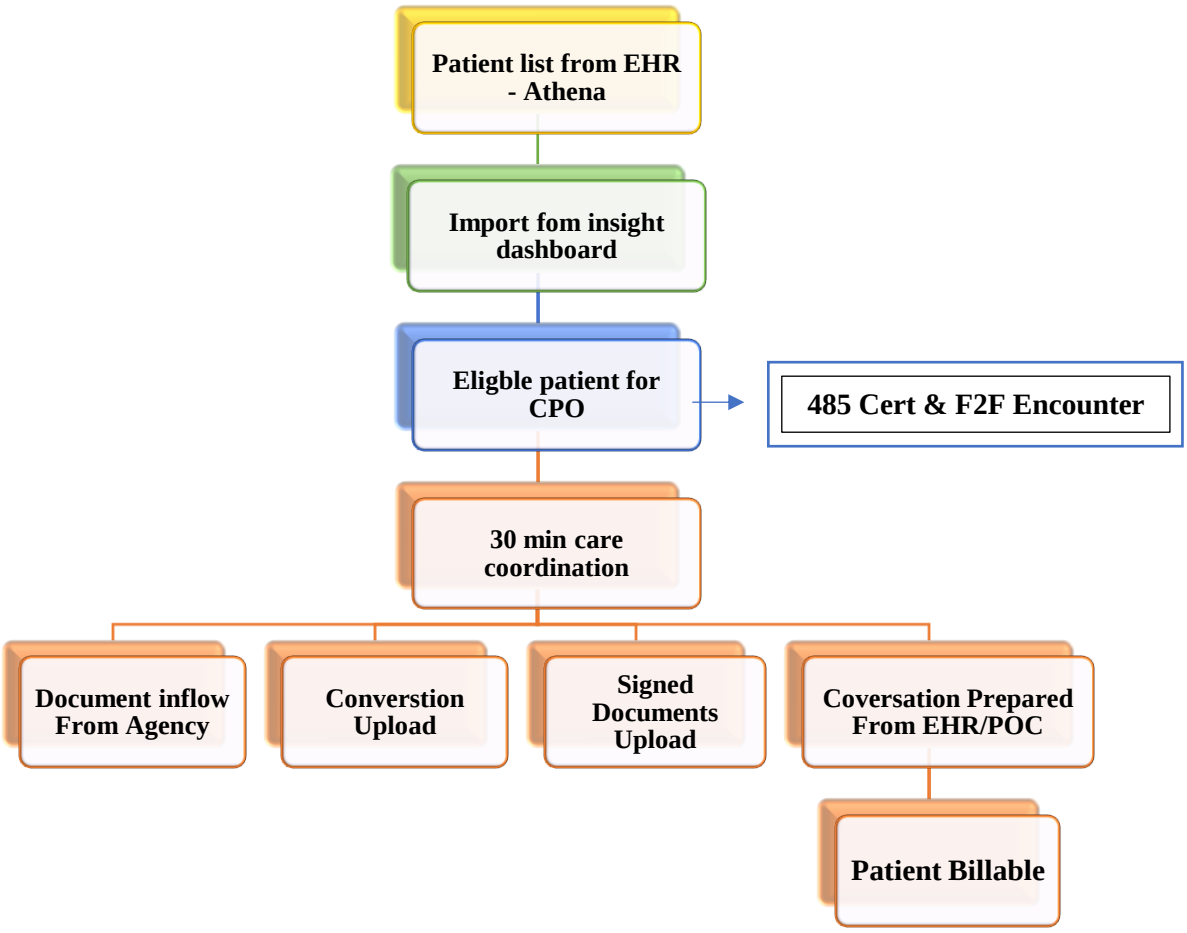

Fig 2.1 Workflow for Physicians Housecalls

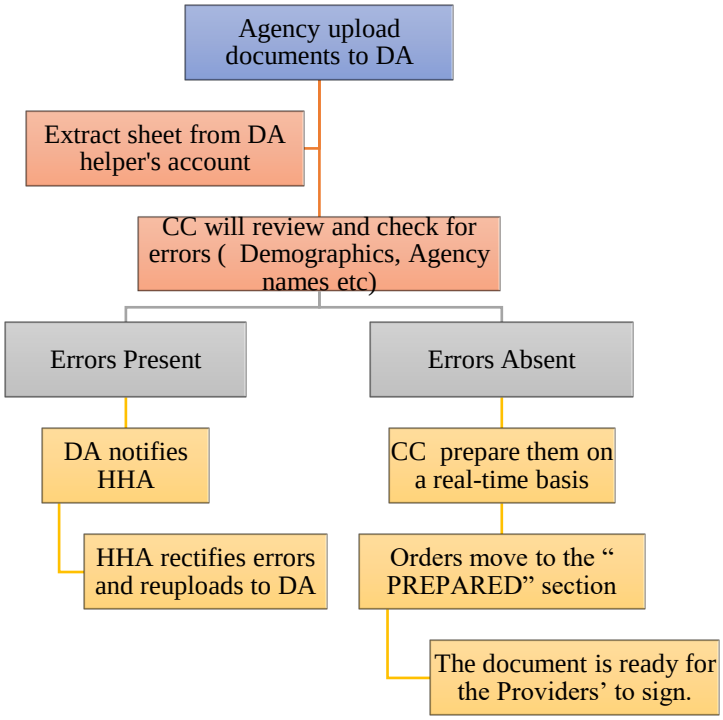

Fig 2.2 Order Preparation

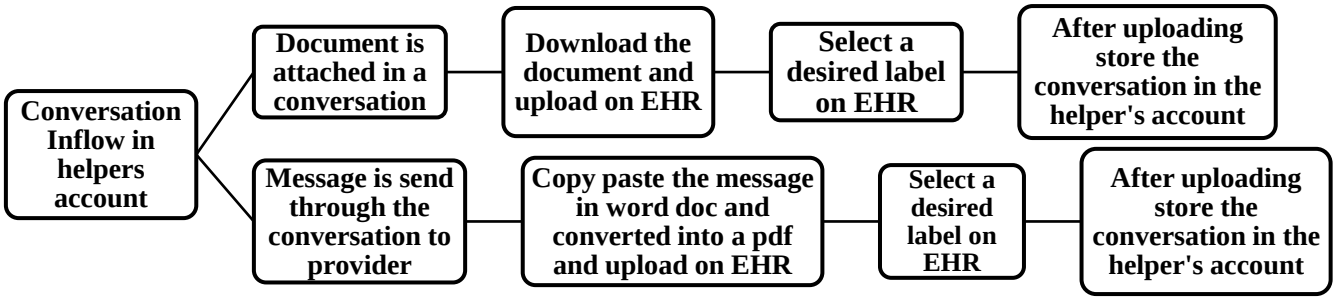

Fig 2.3 Conversation Uploading

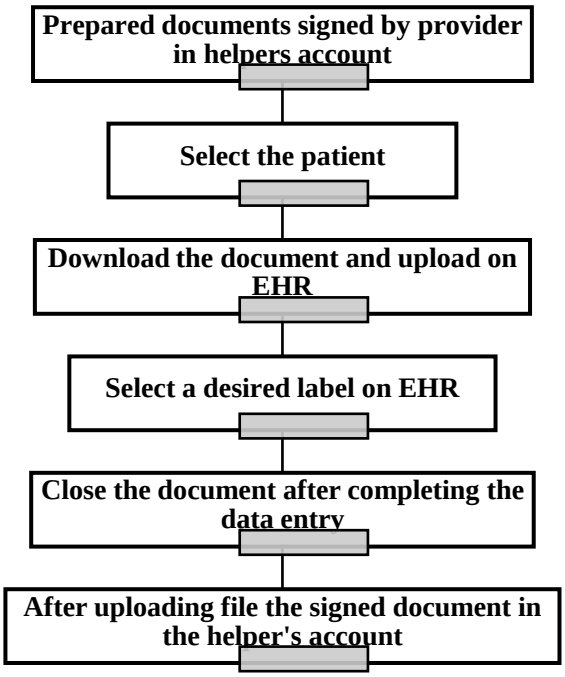

Fig 2.4 Signed Documents Uploading

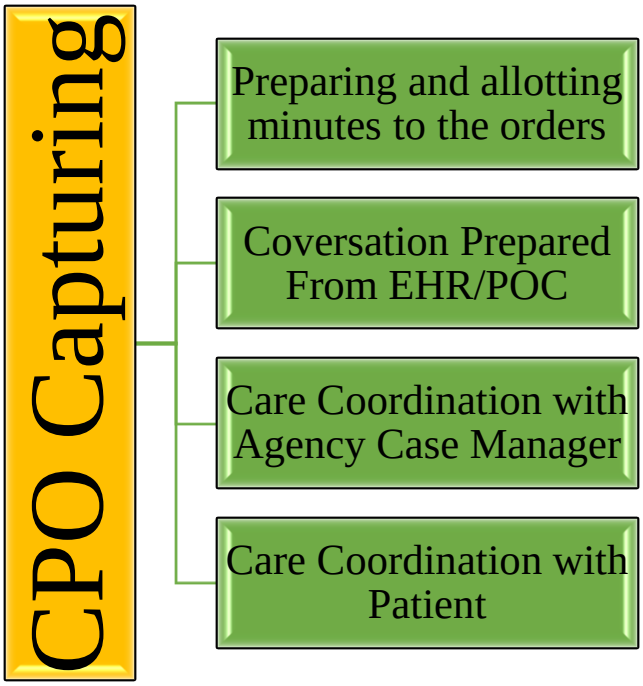

Fig 2.5 CPO Capturing

RESULT

Phase I: Define the problem –

Physician Housecalls proceeds with an aim of providing great quality of care to patients by coordinating with home health agencies. Various pain points occur while coordinating like no real time access to documents of patient, no immediate care to the patient, 20-25 days turn around time for signed documents which have a greater impact on billing of the patient and faxes are used to send a verbal order. Doctor alliance bridge this gap by providing these services and ensure quality of life is maintained.

Phase II: Gap identified in existing workflow of DA –

- Orders flowing through agencies are not prepared and not allotted minutes because of the errors seen while QC validating the orders.
- Conversation inflowed are not uploaded within the given TAT.
- Signed documents are not uploaded within the given TAT.
- Patients are not billed because of lack of resources to capture CPO minutes.
- Non – availability of plan of care and other signed documents of patients on EHR which make them unbillable.

Phase III: Data Analysis –

1. **Order Preparation –**

- Data collection was done on order inflow from 10-04-2023 and ended with collection of total 2287 documents inflow on 16-05-2023.
- Documents consists of plan of care, recertification of plan of care, verbal order by physician, physical therapy evaluation/assessment, occupational therapy evaluation/assessment, speech therapy evaluation/assessment, communication note, lab results and client coordination report.

- A total of 2287 documents were inflowed from 196 agencies of 1000 patients from which 1841 were prepared by clinical coordinators.
- A total of 446 orders remains unprepared because of errors occur while QC validation of those documents.

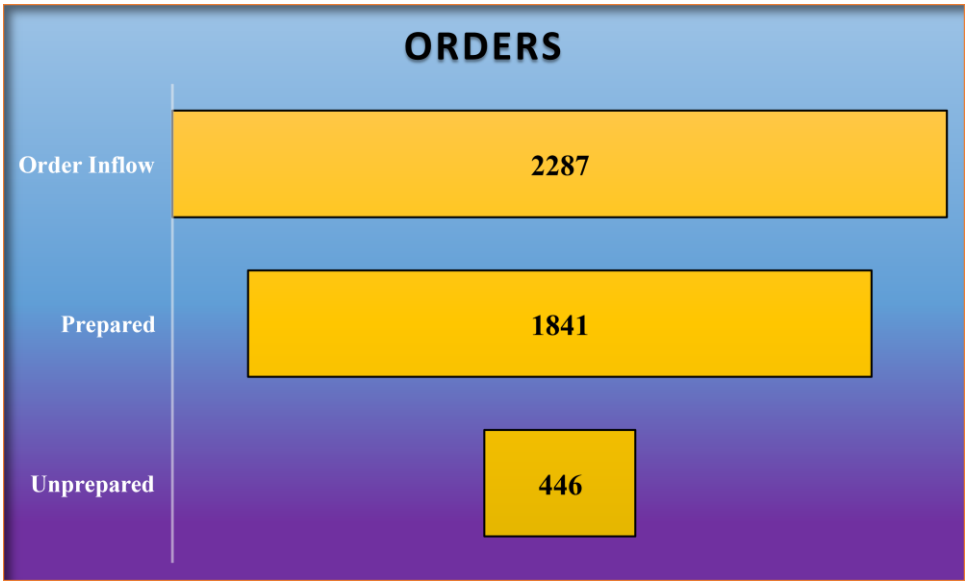

Fig 3.1 Graph for Orders Inflow

- Documents were not prepared by the clinical coordinators because of errors such as redirecting provider, different agency name, patient not found on the EHR(Athena) and incorrect DOB of patient.
- 135 documents were not prepared because the patients have been redirected to the new provider as old provider left the physician group.
- 117 documents were not prepared because the agency name mentioned in the document is different on DA back office or EHR.
- 95 documents were not prepared because the patient was not available in EHR.
- 99 documents were not prepared because the patient date of birth was mentioned incorrect on DA back office or EHR.
- If the orders are not prepared, then 30 minutes of care coordination cannot be completed of the patient as well as the documents cannot be signed by the physician.

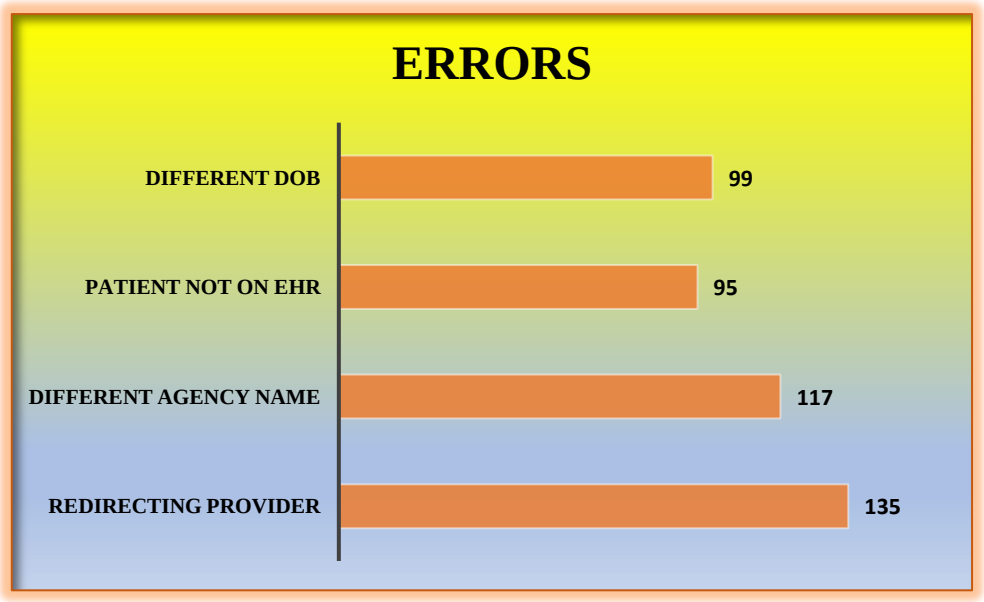

Fig 3.2 Graph for Errors in Orders Inflow

2. Conversation Uploading –

- 229 conversations inflowed out of which 206 uploaded on received date while 23 uploaded days after the received date.
- Conversations have attached documents such as lab results, client coordination report, episode summary report, vital signs, and communication note.
- In conversations home health agency send a message stating the patient condition to receive an immediate care from physician's end.
- 31 conversations inflowed as high priority because some of the documents (lab results, vital signs, message) need immediate attention and should be uploaded on EHR within the TAT of 45-30 minutes.
- If the documents attached in the conversations are not uploaded into the EHR then a physician won't be able to address and sign the documents electronically.

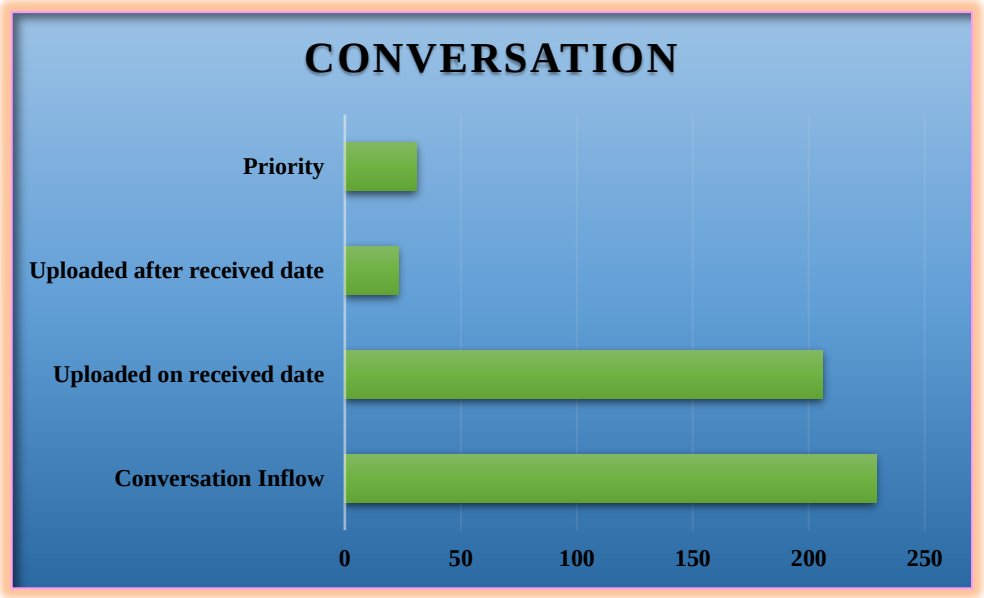

Fig 3.3 Graph for Conversation Uploading

3. Signed Documents Uploading –

- After preparation of an order by care coordinators the document moves to "To Sign" section in DA back office and physician have to sign the document digitally.
- If the document signed by the physician of a patient is not uploaded on the EHR then the patient won't be billed.
- Due to non-availability of documents on EHR home health agency won't be able to access it and this will refrain them to provide care to the patient because DA platform is accessible by physicians only.
- 2287 documents inflowed and all of them were signed by the physician but only 1600 were uploaded on EHR.

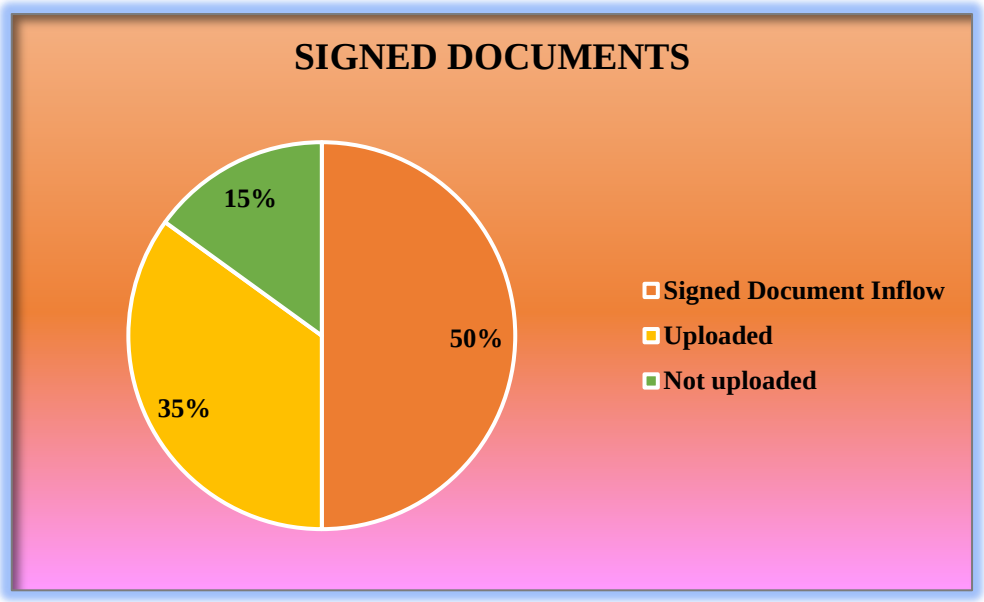

Fig 3.4 Graph for Signed Documents Uploading

4. CPO Capturing -

- 30 minutes of care coordination of 282 patients were completed out of 1000 patients.
- 718 patients care coordination was not completed due to non – availability of documents on EHR, no valid certification period and F2F encounter is not within 6 months.

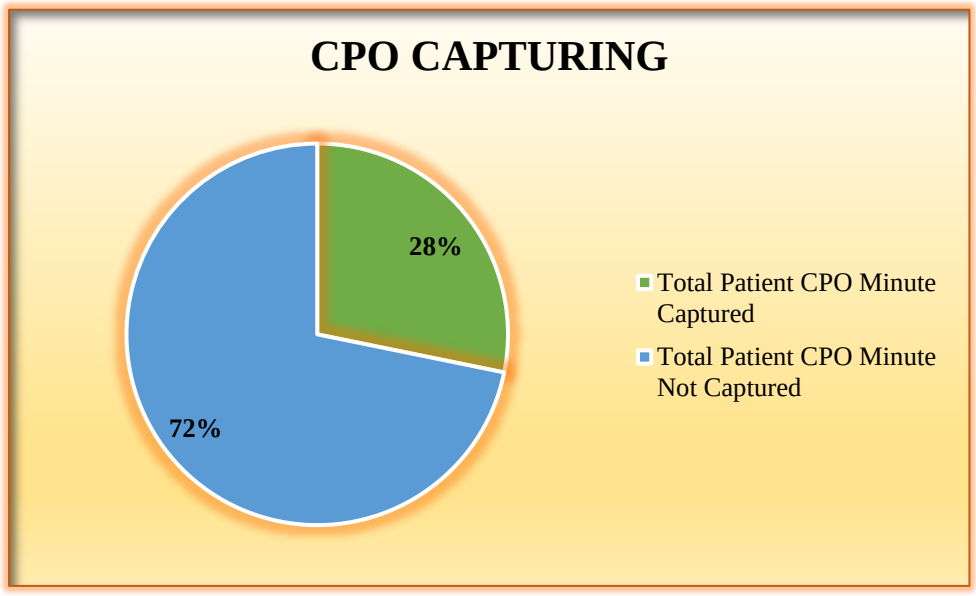

Fig 3.5 Graph for CPO Capturing

5. **Patient Billed –**

- In 1 month, 583 patients were billed under codes G179, G180, and G181 respectively.
- 223 patients have a recertification of 60 days, 78 patients have a certification of 60 days and 282 have completed 30 minutes of care coordination.

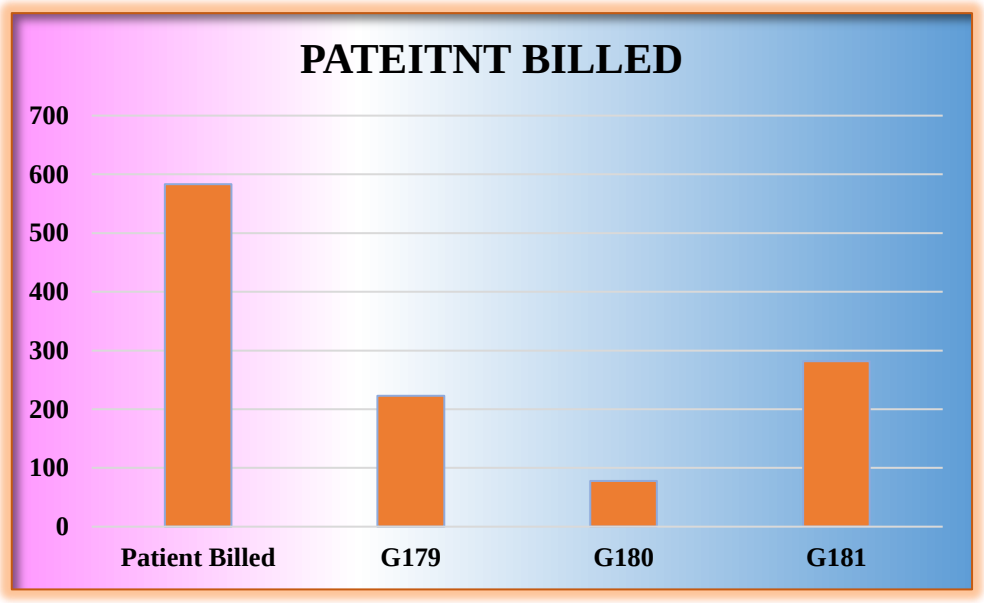

Fig 3.6 Graph for Patient Billed

CONCLUSION

The multidimensional character of the Physician Housecalls workflow done by the DA doctors has been highlighted in this dissertation report, which has offered a thorough examination of the standard of the patient's care. An extensive review of literature, data analysis and examination of a range of variables influencing quality of life has led to some important conclusions.

Firstly, the quality of care applies to a series of elements, including physical, mental, and social dimensions. An interaction of these factors with their effects on the patient's general health cannot be underestimated.

The study also pointed out the importance for healthcare professionals to address and improve quality of patient care. All parts of the PHC workflow involve patient centered care, clear communication and cooperative decision making. In this workflow process, there are numerous procedures that lead to many difficulties and a subsequent decrease in the quality of life.

These bottlenecks have been identified and solutions can be found through a multidisciplinary approach involving more resources, using automation to carry out processes that are not part of the clinical process, thorough verification of patient data and better communication between the home health agency and the physician alliance.

In the end, it is important to continue with research, cooperation, and innovation within this field so that patients are granted the best quality of healthcare enabling them to lead fulfilling lives when faced with health challenges.

REFERENCES

a) Anderlini, D. (2018). The United States health care system is sick: From Adam Smith to overspecialization. *Cureus*, *10*(5), e2720. https://doi.org/10.7759/cureus.2720

b) Brook, R. H., Kamberg, C. J., Mayer-Oakes, A., Beers, M. H., Raube, K., & Steiner, A. (1990). Appropriateness of acute medical care for the elderly: an analysis of the literature. *Health Policy (Amsterdam, Netherlands)*, *14*(3), 225–242. https://doi.org/10.1016/0168-8510(90)90037-e

c) Casalino, L. P., Devers, K. J., Lake, T. K., Reed, M., & Stoddard, J. J. (2003). Benefits of and barriers to large medical group practice in the United States. *Archives of Internal Medicine*, *163*(16), 1958–1964. https://doi.org/10.1001/archinte.163.16.1958

d) De Lew, N., Greenberg, G., & Kinchen, K. (1992). A layman's guide to the U.S. health care system. *Health Care Financing Review*, *14*(1), 151–169.

e) De Vliegher, K., Aertgeerts, B., Declercq, A., Milisen, K., Sermeus, W., & Moons, P. (2015). Shifting care from hospital to home: a qualitative study: Kristel De Vliegher and colleagues explain how relocating healthcare services for people with complex conditions can affect the staff involved. *Primary Health Care*, *25*(9), 26–33. https://doi.org/10.7748/phc.25.9.26.s28

f) Gillsjö, C., Schwartz-Barcott, D., & von Post, I. (2011). Home: the place the older adult cannot imagine living without. *BMC Geriatrics*, *11*, 10. https://doi.org/10.1186/1471-2318-11-10

g) Hays, R. B., & Sanderson, L. (1994). Forming large group practices: is it worth it? *The Medical Journal of Australia*, *161*(8), 494–496. https://doi.org/10.5694/j.1326-5377.1994.tb127566.x

h) Howe, D. L., Dozier, A. L., & Dickenson, S. O. (2022). *Healthcare in the United States*. University of North.

i) Izumi, S., Barfield, P. A., Basin, B., Mood, L., Neunzert, C., Tadesse, R., Bradley, K. J., & Tanner, C. A. (2018). Care coordination: Identifying and connecting the most appropriate care to the patients. *Research in Nursing & Health*, *41*(1), 49–56. https://doi.org/10.1002/nur.21843

j) Kash, B., & Tan, D. (2016). Physician group practice trends: A comprehensive review. *Journal of Hospital & Medical Management*, *2*(1). https://doi.org/10.4172/2471-9781.100008

k) *Overview of the U.S. health care system*. (2006). Arizona.edu. https://publichealth.arizona.edu/sites/publichealth.arizona.edu/files/Chua_Kao-Ping_HealthCareSystemOverview_2006.pdf

l) Rothenberger, D. A. (2017). Physician burnout and well-being: A systematic review and framework for action: A systematic review and framework for action. *Diseases of the Colon and Rectum*, *60*(6), 567–576. https://doi.org/10.1097/dcr.0000000000000844

m) West, C. P., Dyrbye, L. N., Erwin, P. J., & Shanafelt, T. D. (2016). Interventions to prevent and reduce physician burnout: a systematic review and meta-analysis. *Lancet*, *388*(10057), 2272–2281. https://doi.org/10.1016/s0140-6736(16)31279-x

n) Wouters, A. V., & Hester, J. (1988). Patient choice of providers in a preferred provider organization. *Medical Care, 26*(3), 240–255. https://doi.org/10.1097/00005650-198803000-00002

o) Zwiep, T. M., Greenberg, J. A., Balaa, F., McIsaac, D. I., Musselman, R. P., Raiche, I., Williams, L., & Moloo, H. (2018). Impact of group practices on patients, physicians and healthcare systems: protocol for a scoping review. *BMJ Open*, *8*(9), e022164. https://doi.org/10.1136/bmjopen-2018-022164

p) Burns, L. R., Goldsmith, J. C., & Sen, A. (2013). Horizontal and vertical integration of physicians: a tale of two tails. *Advances in Health Care Management*, *15*, 39–117. https://doi.org/10.1108/s1474-8231(2013)0000015009

q) Devlin, R. A., Hogg, W., Zhong, J., Shortt, M., Dahrouge, S., & Russell, G. (2013). Practice size, financial sharing and quality of care. *BMC Health Services Research*, *13*(1), 446. https://doi.org/10.1186/1472-6963-13-446

r) Feron J-M, Cerexhe F, Pestiaux D, et al... Gps working in solo practice: obstacles and motivations for working in a group? A qualitative study. Fam Pract 2003 https://academic.oup.com/fampra/article/20/2/167/449558