INTRODUCTION

- Our hospital’s Pain Service database (PSDB) generates a daily report from our EMR to identify patients with an average pain score of 7 or greater in the preceding 12 hours. This pain stewardship (PS) report allows the anesthesia pain service (APS) to evaluate their pain management and see if we can offer assistance to the ward teams.

- Patients with sickle cell (SC) disease have multiple episodes of pain crises necessitating admission. An analysis of the PS data identified SC patients as the largest group of patients with the most recurrent records in the DB.

- In response, our Hematology/Oncology (H/O) department instituted a series of changes to improve the pain control of these patients.

- This review examined the effectiveness of these changes on the rate of recurrent reports on SCD patients as detected by our PSDB. The data has been collected since 7/2013.

METHODS

- A daily report generated from our EMR (Epic Systems, Verona WI) surveys the hospital for patients with pain scores of 7 or greater in the preceding 12 hours. This information is entered into the DB (Microsoft Access, Bellevue WA). The data elements include medical identifier, name, gender, diagnosis, age, weight, service, disposition and pain scores.

- On 4/2014 a care set was implemented for the admitted SC patients to standardize their pain management. On 1/2015 an advance practice nurse (APN) was added to the H/O team to oversee their management and liaise with them as outpatients (Fig. 1).

- The PSDB was analyzed to see the impact of these changes in the management. The total number of SC records, number of unique patients who showed up once, twice or less and three times or less, in the PSDB records were compared.

RESULTS

- The PSDB contained 1746 records in all with 444 (25.4%) from the H/O service. 51.5% (228) of the H/O records were from SCD patients.

- The number of SC disease reports recorded in the PSDB by period is shown in Figure 2. In period 3 one patient accounted for 29 records.

- Figure 3 shows the number of reports of unique patients by time period. The % of patients that had only one report was 30% in period 1 (no care set) and period 2 (care set introduced), and increased to 57% in period 3 (APN was introduced). Unique patients with three reports and up, and greater than three, showed progressive decreases in periods 2 and 3.

CONCLUSIONS

- Our pain stewardship report identifies all hospitalized inpatients experiencing severe pain.

- The PSDB has revealed the usefulness of inpatient pain management care set and the subsequent addition of an APN dedicated to the inpatient and outpatient follow-up of these patients with severe pain.

REFERENCES