Implementing 5S Methodology to Maximize Flow and Efficiency in Shelter-Based Student Clinic.

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**Implementing 5S Methodology to Maximize Flow and Efficiency in Shelter-Based Student Clinic**

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**INTRODUCTION & BACKGROUND:**
- Valley Youth House (VYH) is a shelter for temporarily homeless and displaced teenagers in Allentown PA.  
- Student-volunteer shelter-based clinic  
- Partnered with Lehigh Valley Street Medicine  
- Provides mandated physical exams as well as acute care for residents

**AIM:**
Use 5S Methodology to sustain prior clinical improvements throughout leadership turnover and continue to increase efficiency by decreasing patient down time and total visit time.

**MEASUREMENTS/METRICS:**
- Sustained Measures:  
  - 100% of patient charts completed at end of clinic  
  - Reduced H&P completion time  
  - Overall patient visit time  
  - Patient downtime between vitals and visit  
  - Total clinic time

**DATA & RESULTS:**

**Figure 1:** Average H&P completion time decreased from 27 minutes to 23 minutes, a 14% reduction.

**Figure 2:** Average chart completion by end of clinic rose from 0 to 100% and sustained through remaining phases.

**Figure 3:** Patient visit vs Total clinic time

**Figure 4:** Subdivisions of clinic time (Current phase)

**CHALLENGES FACED:**
- Recording times at each clinic  
  - Staff prioritizes seeing patients when volume is higher than normal

- Variation in personnel recording times  
  - Personnel that are not accustomed to the role of recording timepoints may miss the timepoint or interpret them differently

- Infrequency of clinic dates  
  - Only 2 per month, with alternating volunteers

- Bringing care to the patient  
  - Transporting equipment  
  - Converting rooms into clinical spaces

**NEXT STEPS:**
- Implement new electronic patient tracking sheet  
- Subdivision of recorded times for better visualization of where improvements can be made  
- Sustain effects of previous changes

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