Rational:
- Identifying and targeting substandard performance depend on the ability to detect any alarming patterns of course conduction.

Purpose:
- To generate a monitoring process of all ERC course activities and interventions performed under the umbrella of the Sudan-RC.

Materials and Methods:
- Prospective analysis of all ERC-ALS courses performed under Sudan-RC during 2018.
- An end-of-course standardized online feedback form of all activities and faculty performance is sent to candidates and faculty.
- Three domains were covered:
  - Administration - Teaching Quality
  - Faculty Performance
- Feedback contained 51 structured (5-points) Likert scale questions.
- Percentages and frequencies of Likert scale numerical grades were used to identify substandard performance.
- Substandard performance was defined as any score percentage < 80%.
- Cronbach alpha was used to assess reliability.
- T-test to compare between different venues, directors or faculty members.
- A 20/80 Pareto’s principle is then applied to target substandard items.

Results:
- Twenty-four ERC-ALS courses conducted during 2018.
- Five CDs, >20 faculty members and 315 candidates participated in these courses.
- Candidates’ and faculty response rates were 21.6% and 63.2% respectively.
- Whole feedback Cronbach’s alpha was 0.86 reflecting good reliability with error variance of 0.26 indicating good internal consistency.
- Only course administration was substandard (87%) with good teaching and performance standard > 90%.
- Manuals received < 2 weeks and program received < 1 week were the main reasons for substandard administration.
- Pareto’s chart was applied for different CDs, venues or faculty members using SPSS revealed no substandard patterns to be targeted operating 20/80 Pareto’s principle.
- See e.g. lecture +/- demos for one CD referred to as CD-1 in the chart below.

Conclusion:
- Utilizing Pareto’s principle can be used identify substandard performance patterns.
- Pattern identification and correction could provide an effective monitoring process that specifically identify and target substandard items in course activities for correction.