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Academy Task Force Call – Subgroup One

Participants:
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Development of the conceptual model:

Today's call was centered around the Development of the conceptual model in the DxCP Initiative. Dr. Schnall led a discussion on the possible components of the cockpit moving forward. These included, but were not limited to; screening awareness, detection, diagnosis, treatment & survivorship, data acquisition, data aggregation, data analytics, and clinical guidance.

Some key questions to be answered on the call;
- What is missing from the high-level processing maps?
- How do we aggregate data from so many different sources?
- What are the missing layers of data standards and their organization and how do we define them?

NEXT STEPS:

Task force sub-group one will regroup to report on progress.

1. This Task Force needs to create the tools that will help to speed up the evolution of this cockpit and related programs. This can be done through;
   a. The acquisition and aggregation of data that can then be publicly available. (This may need to be government led and may require action by Congress.)
   b. Development of standards of communication around clinical context that extends beyond the diagnosis itself.
      i. This includes information like size and location of lesion, vascular involvement, current and previous therapies, co-morbidities, other risk factors
      ii. This could include non-traditional sets of data that extend beyond typical clinical data. (Ex: Socio-economic factors).
2. A second phase of this process includes discussion of the regulatory challenges that are faced by algorithms that touch on clinical decision making.
   a. The cost of developing and achieving regulatory clearance for these algorithms is high. Furthermore, clinical adoption will be gated by the same questions that regulatory bodies have: efficacy, robustness, where does it fail, etc
b. Strategies to streamline initial regulatory clearance of decision support algorithms. On today’s call the idea of synthetic data was discussed as well as an “ongoing after market monitoring program” to ensure that the cockpit does not evolve in the wrong ways.

c. Strategies to accommodate learning algorithms that can to grow and evolve as they are fed with more data.