Sustainability of “This Old House”

Total healthcare infrastructure sustainability requires the facility to look forward at its new buildings but also to look back at the renewal and operations plans for its existing infrastructure. A plan to sustain new construction requires a total life cycle cost view without losing some of the key elements – reliability and maintainability. Once these buildings are constructed, inherited, reconfigured or re-purposed, a plan to maintain the existing infrastructure in a sustainable fashion is essential. This plan requires the ability to reflect on a master facility plan, determining an investment strategy for the facilities. This investment strategy is essentially an ongoing operational sustainability plan which must include environmental factors, energy efficiency and improvements, patient and life safety and overall maintainability.

This presentation will focus on an overall strategy of managing an existing portfolio of hospital buildings. The key factors in an overall sustainable infrastructure plan include:

- What features must be paramount in new construction or renovation
- How does a facility determine these features (i.e. what is our space life cycle/turnover?, what is the facility funding model for infrastructure renewal, what is the likelihood of re-programming, etc.)
- How does a site determine the preventive maintenance model (and budgets) necessary to match the life cycle, usage and turnover of the installed infrastructure with the infrastructure renewal funding to the re-programming/renovation of space.
- How do we maintain our new technological systems – where preventive maintenance does not really extend their life and may not even enhance reliability?

Session Objectives:

- Present to users sustainability as viewed from a holistic viewpoint – new construction but with a focus on the long term maintenance – considering environmental impacts, maintainability, reliability and system redundancy.
- Review how sustainability must be factored into new construction
- Discuss how the knowledge of the site master plan is necessary for an overall sustainable operational plan.
- Present and discuss examples on how sustainability fits into regular operational and maintenance planning (e.g. life cycle planning, existing equipment preventive maintenance, existing infrastructure renewal, etc.)