

Virtual Families – A Tool to Integrate Basic, Clinical and Health System Sciences

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Innovation Identified

The CareForward curriculum at EVMS incorporates a longitudinal case-based, approach utilizing a virtual community of culturally-diverse families. In addition to addressing relevant aspects of basic and clinical sciences, chronic disease prevention and management, high value and cost-conscious care, the cases also address variables such as veteran affairs, family dynamics, financial turbulence within families, health equity/disparity, roles within a care delivery team, access to community resources, interactions of organizations and complexities of care in specific patient populations.

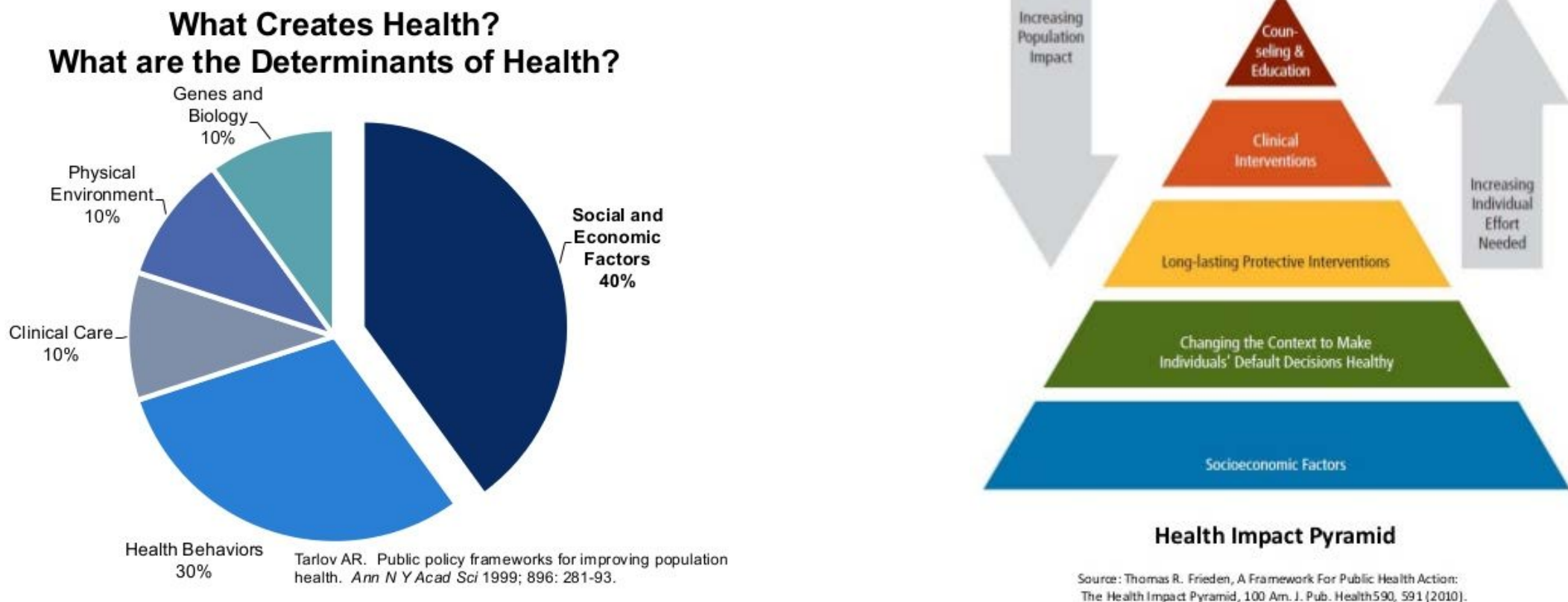


Resources Needed and Potential Barriers

- In addition to the avatars and connecting back stories for implementing this model, we also developed a web-based performance support system to develop unified formatted clinical cases. (CaseMakerMD)
- Clinical and basic science faculty: meet 1 ½ hrs every week to review the cases
- One clinical faculty to oversee all case-based activities: 0.20 FTE
- Potential barriers:
1. Finding curricular time: we have sought fixed hours in each module and hope this should address this concern
 2. Faculty development: we are in the process of designing a faculty development program on social determinants of health
 3. Resources to financially support clinical faculty involvement
 4. Taking on this in conjunction with a major curriculum reform and intentionally integrating this into relevant areas of our new curriculum

Need/Gap Addressed

In many case-based learning activities, the focus is the disease, disease process and standards of care.

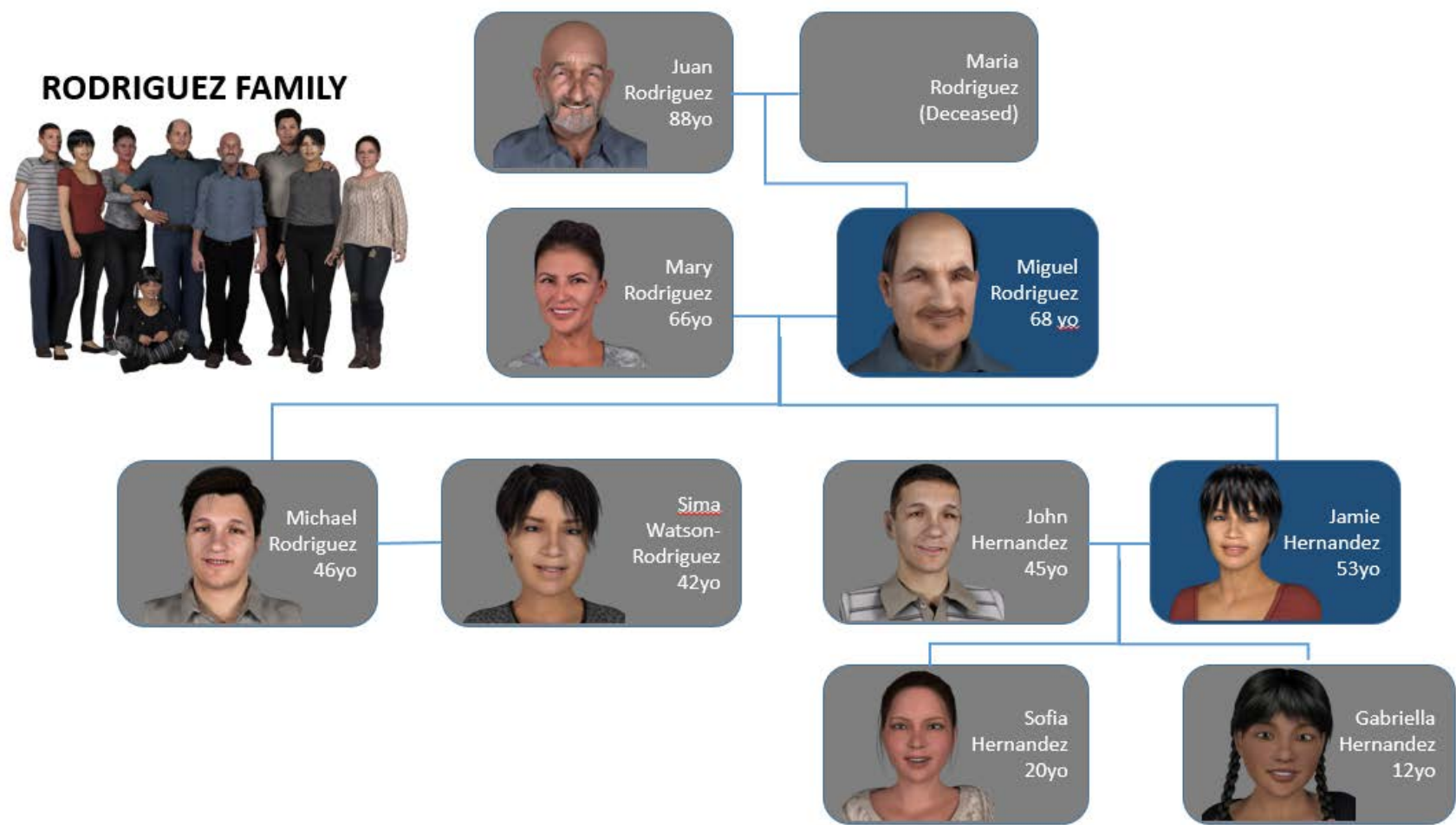


Our cases are embodied in virtual family characters and demonstrate core sciences and key socioeconomic, educational, mental health, lifestyle and environmental factors that impact the individual's health outcomes. Learners interact with these patient stories longitudinally and thus better appreciate the dynamics of health and barriers to health and caring in the real world.

Because the family relationships and social context have been defined for each of our 40+ virtual family characters, it is easy to adapt the clinical cases for GME or UME audience. Instead of using isolated clinical cases, the learning sessions in the GME settings can be designed around these virtual family character based clinical cases.

Timeline Proposed

- Onboarding institutions with details of this model: 1 month
- Resolving networking capabilities to access CaseMakerMD: 3 months
- Faculty development: 3 months
- While some of these can happen in parallel, we estimate about 7 to 8 months for an institution to implement this model into their existing curricula



Stakeholder Input

- The concept has been presented at multiple forums and below is a summary of scholarly work that has been done to date:
1. Letter to the Editor in Academic Medicine journal
 2. Over 10 oral and poster presentations at national meetings
 3. Invitation to other AMA consortium school
- After the first 18-weeks of our experience with this educational model, student feedback was sought and lessons were learned. This helped us revise the model in which cases were used. Below is the data to show before and after the changes.

Exercises with cases drawn from the virtual families was a worthwhile learning experience.

	First 18 weeks	Second 18 weeks
Strongly Disagree	7.79%	1.32%
Disagree	14.77%	1.97%
Neutral	29.97%	9.21%
Agree	37.17%	41.45%
Strongly Agree	9.98%	46.05%

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