



AMERICAN ACADEMY *of* ACTUARIES

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Cancer Claim Cost Table Work Group

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Charge of the Group

- The CCCTWG was formed to collect industry cancer insurance product claim data to form updates to the current valuation standard (1985 cancer claim cost tables)
- Secondary output would be tables that actuaries could use in pricing
- Data collection limited to first occurrence and hospitalization benefits



Current Status

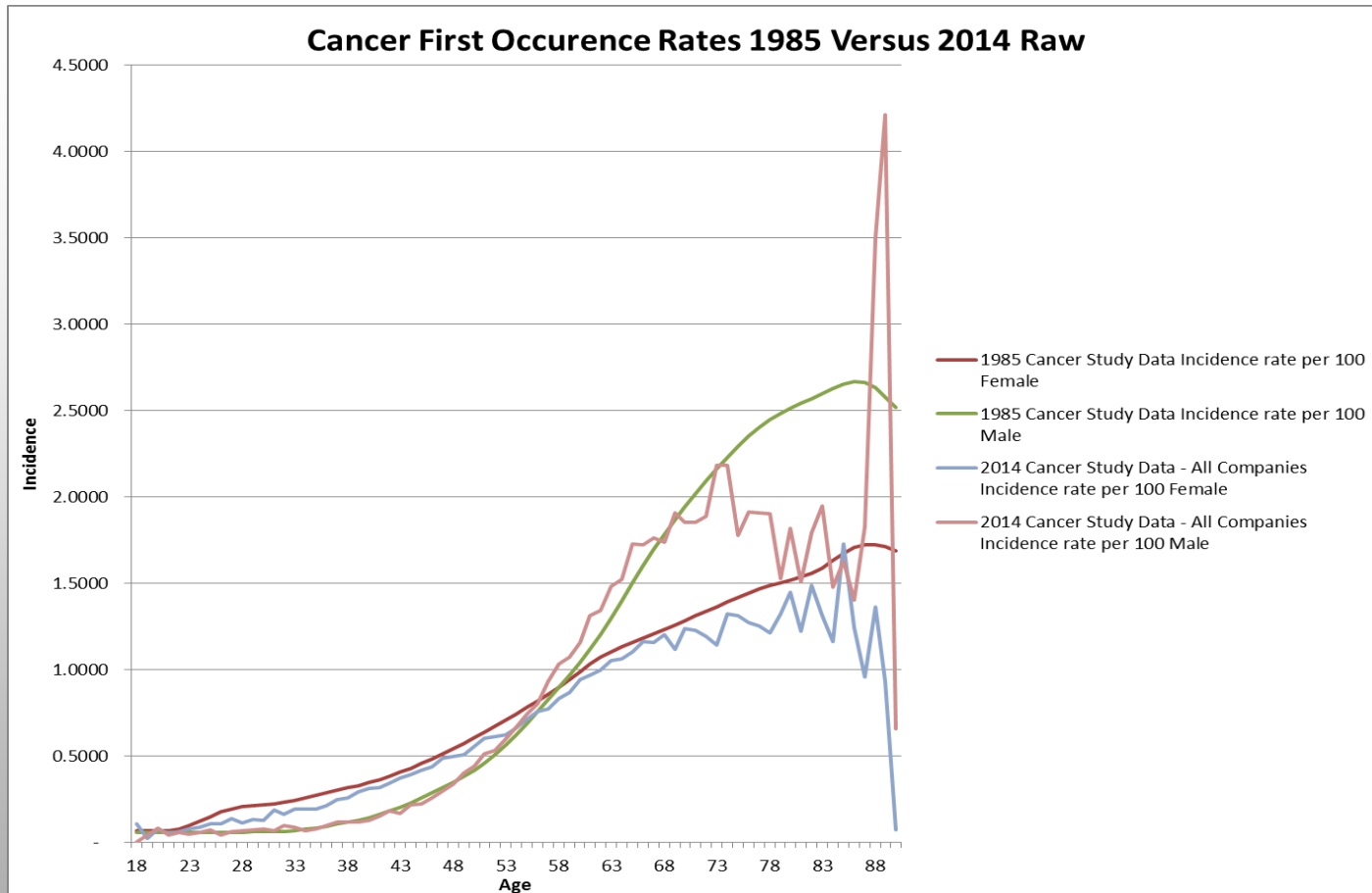
- Industry data has been collected and reviewed
- Graduation methods were discussed and a graduation method (i.e., generalized linear model) has been agreed on.
- All data has been graduated except for length of stay data.
- Presentations of data follow



Comparisons of 2014 Raw Data to 1985 Tables



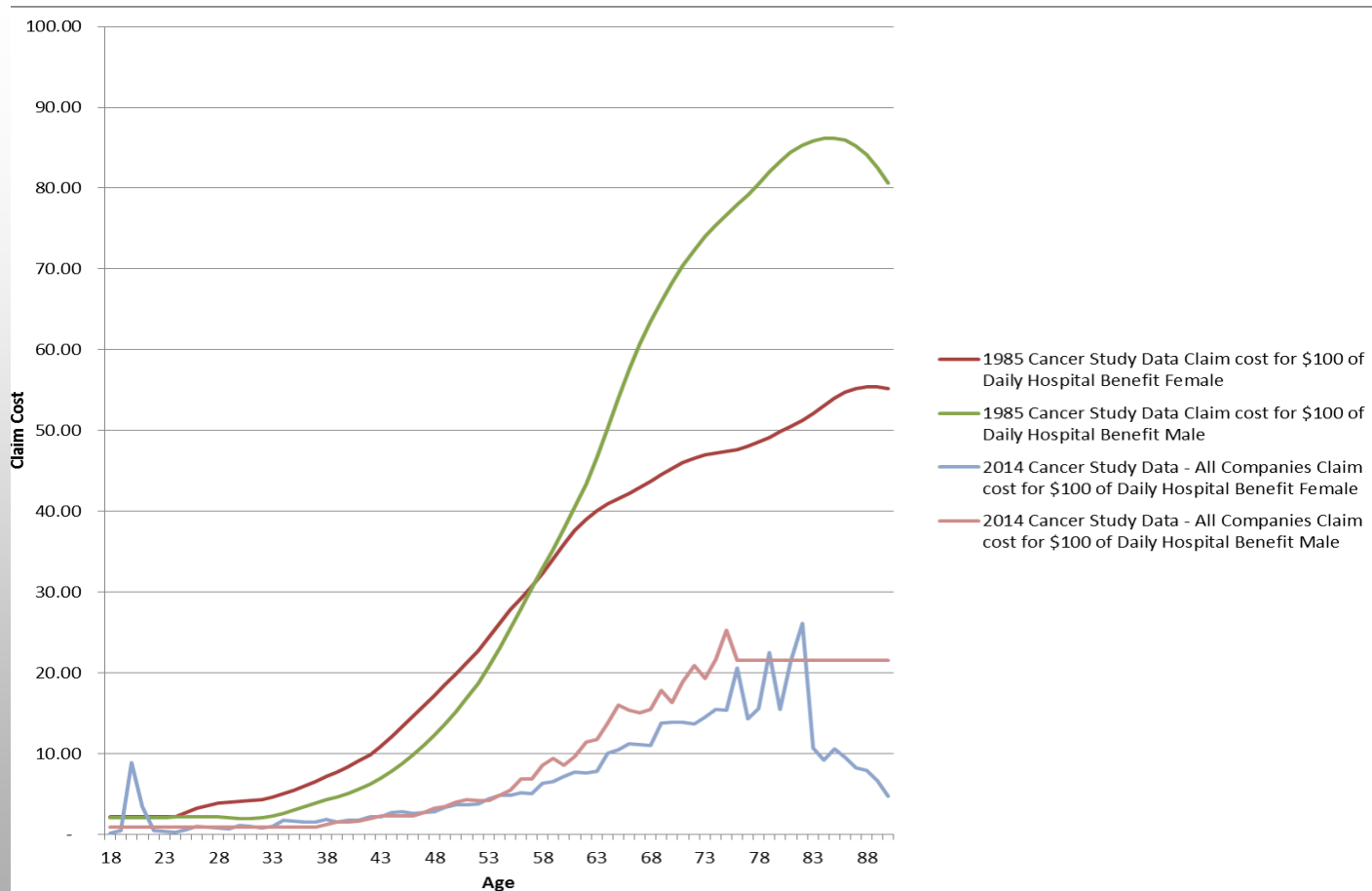
First Occurrence Data



Data compiled by the CCCTWG



Hospitalization Claim Cost Data



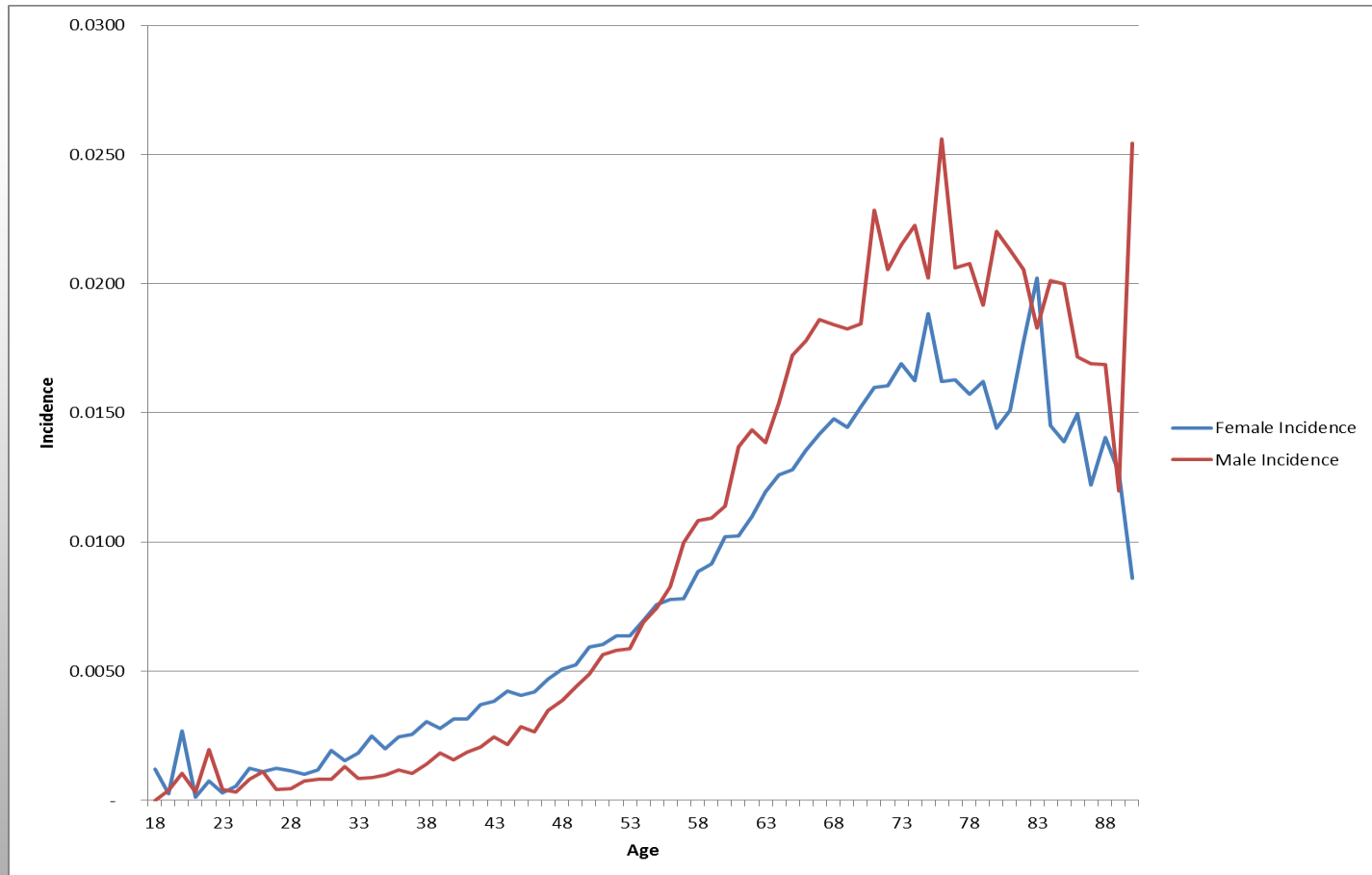
Data compiled by the CCCTWG



Closer Look at the Raw Hospital Data



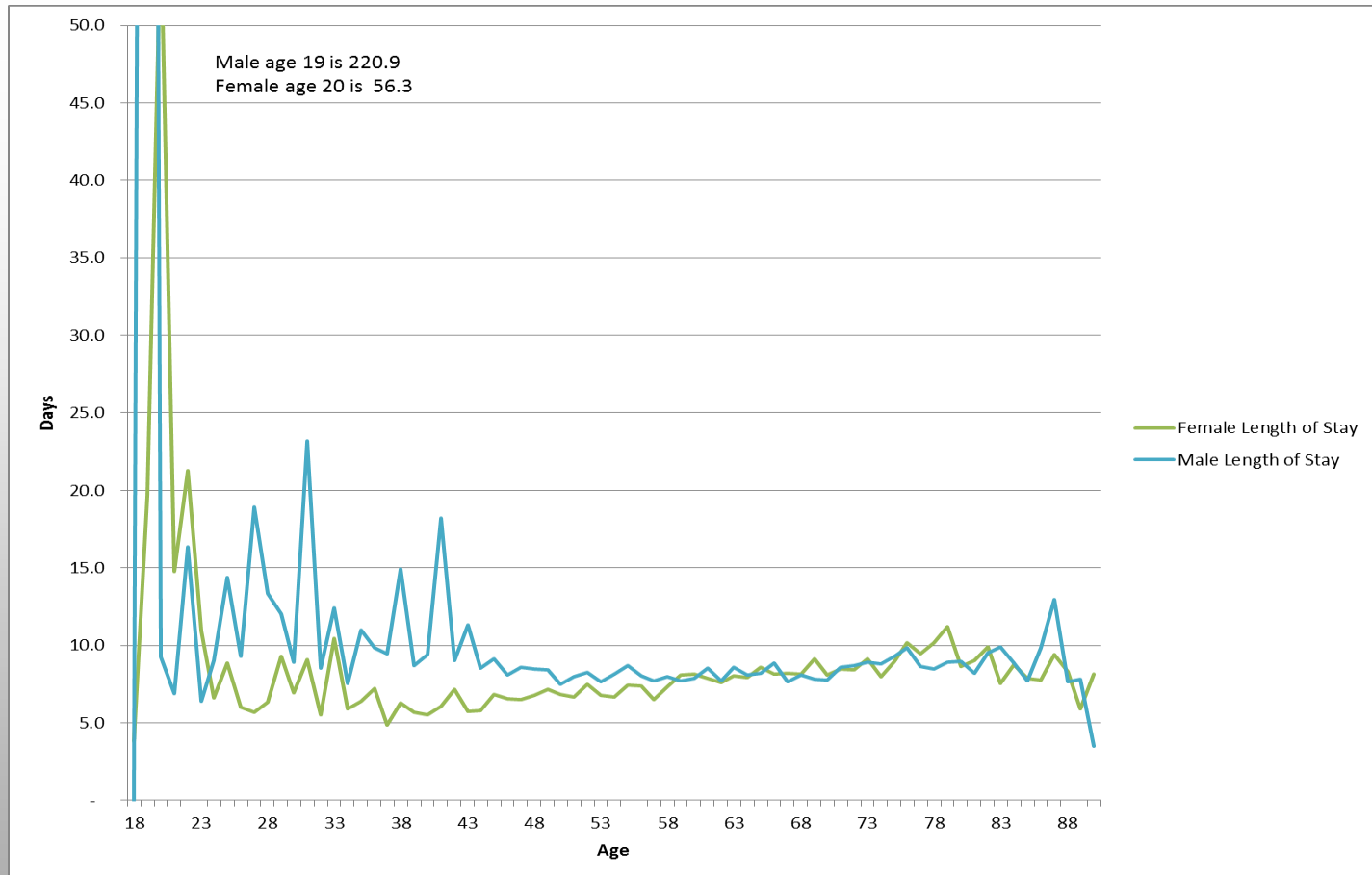
All Payment Hospital Incidence



Data compiled by the CCCTWG



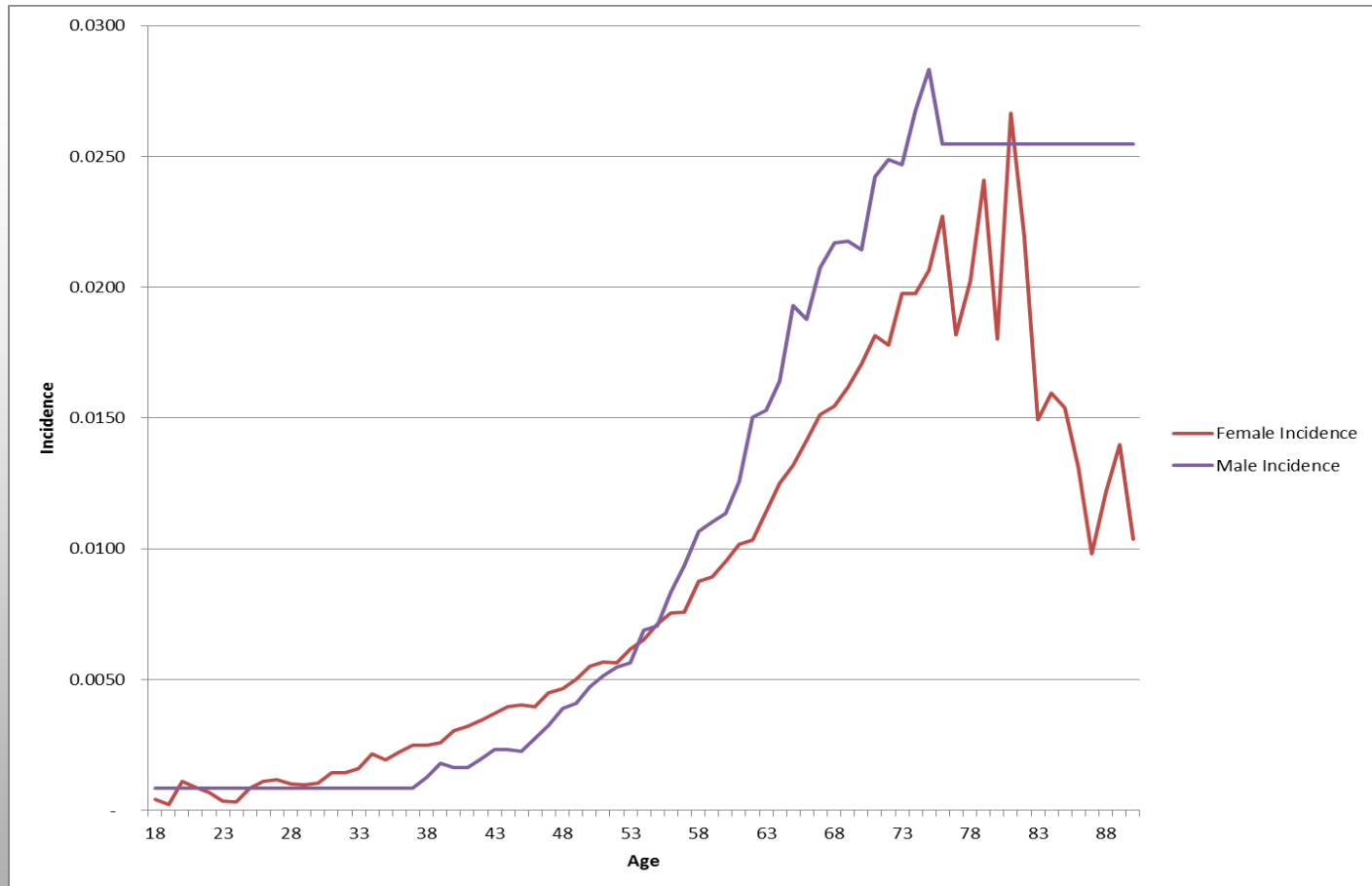
All Payment Hospital Length of Stay



Data compiled by the CCCTWG



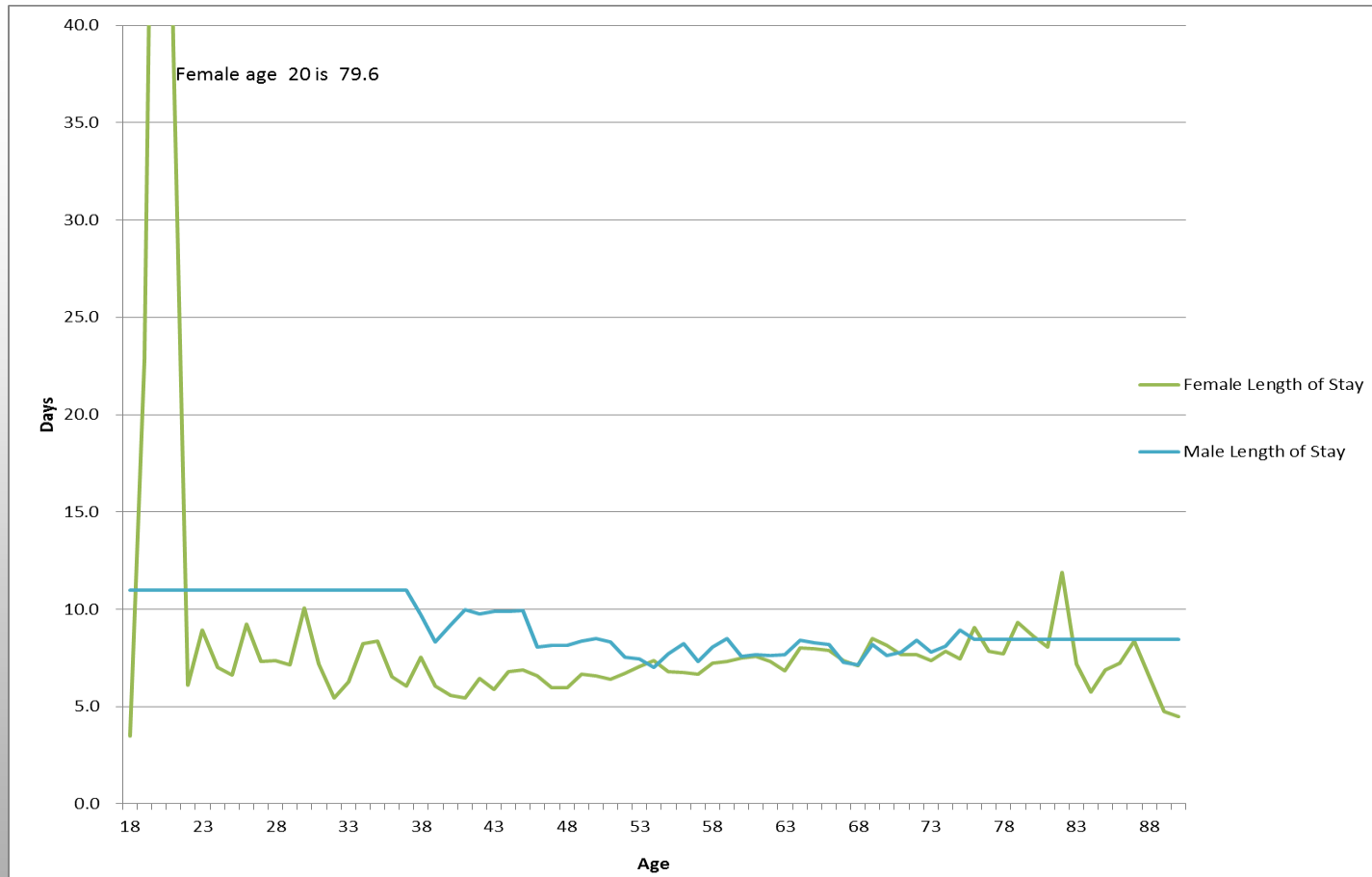
Each Payment Hospital Incidence



Data compiled by the CCCTWG



Each Payment Hospital Length of Stay



Data compiled by the CCCTWG



Graduated Data

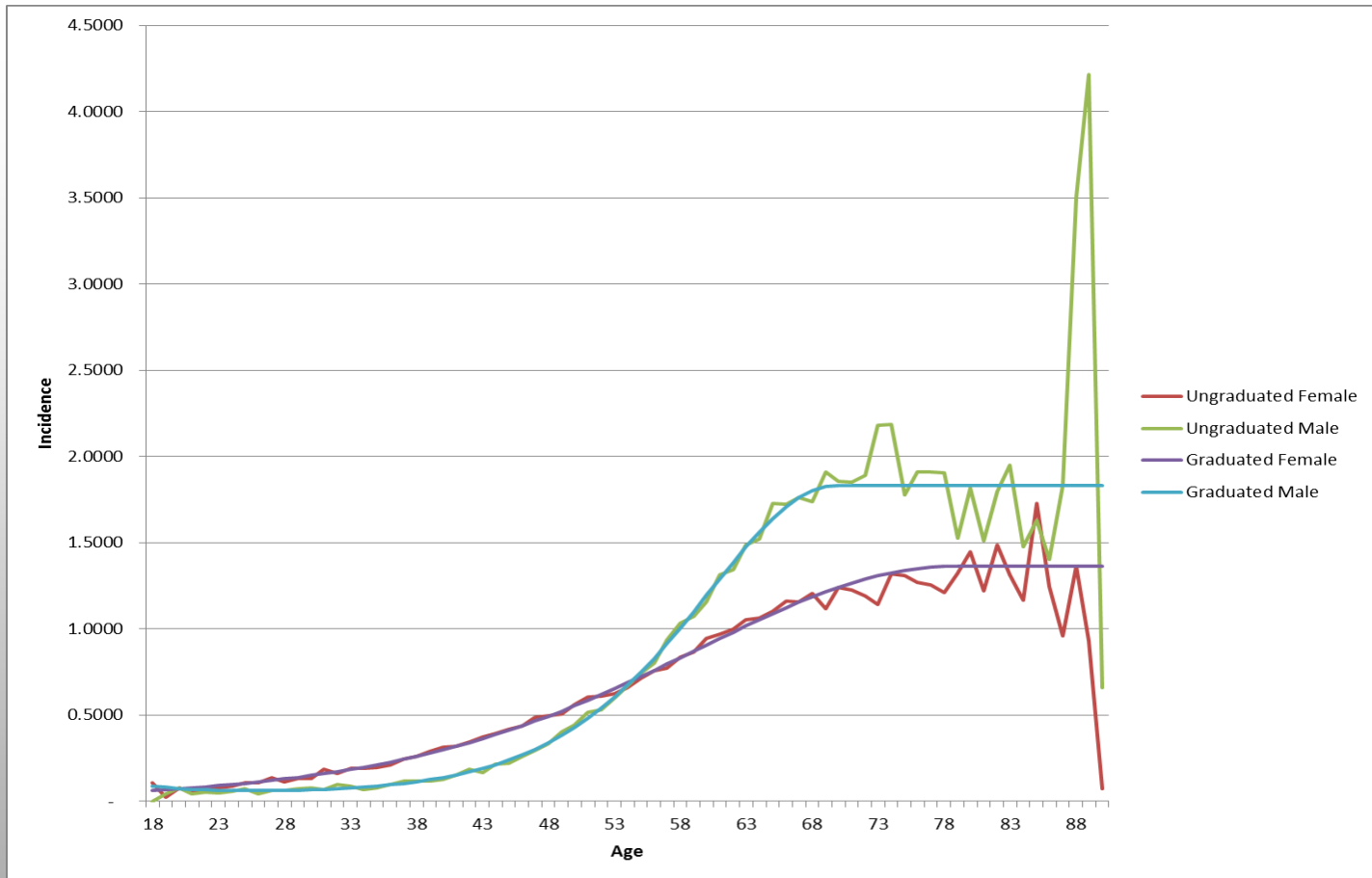
- The group agreed to use a generalized linear model (GLM) graduation method to graduate the data
- The group also decided that it did not want to have graduated data at older ages decline
 - Negative reserve issues
 - Credibility lower at older ages
- To achieve this, the GLM3 method was used on a subset of data yielding a non-decreasing graduated pattern



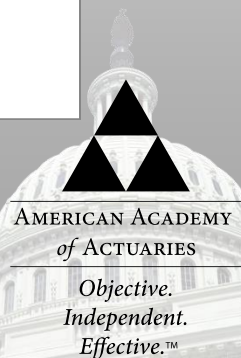
Graduated Results Compared to Raw Data



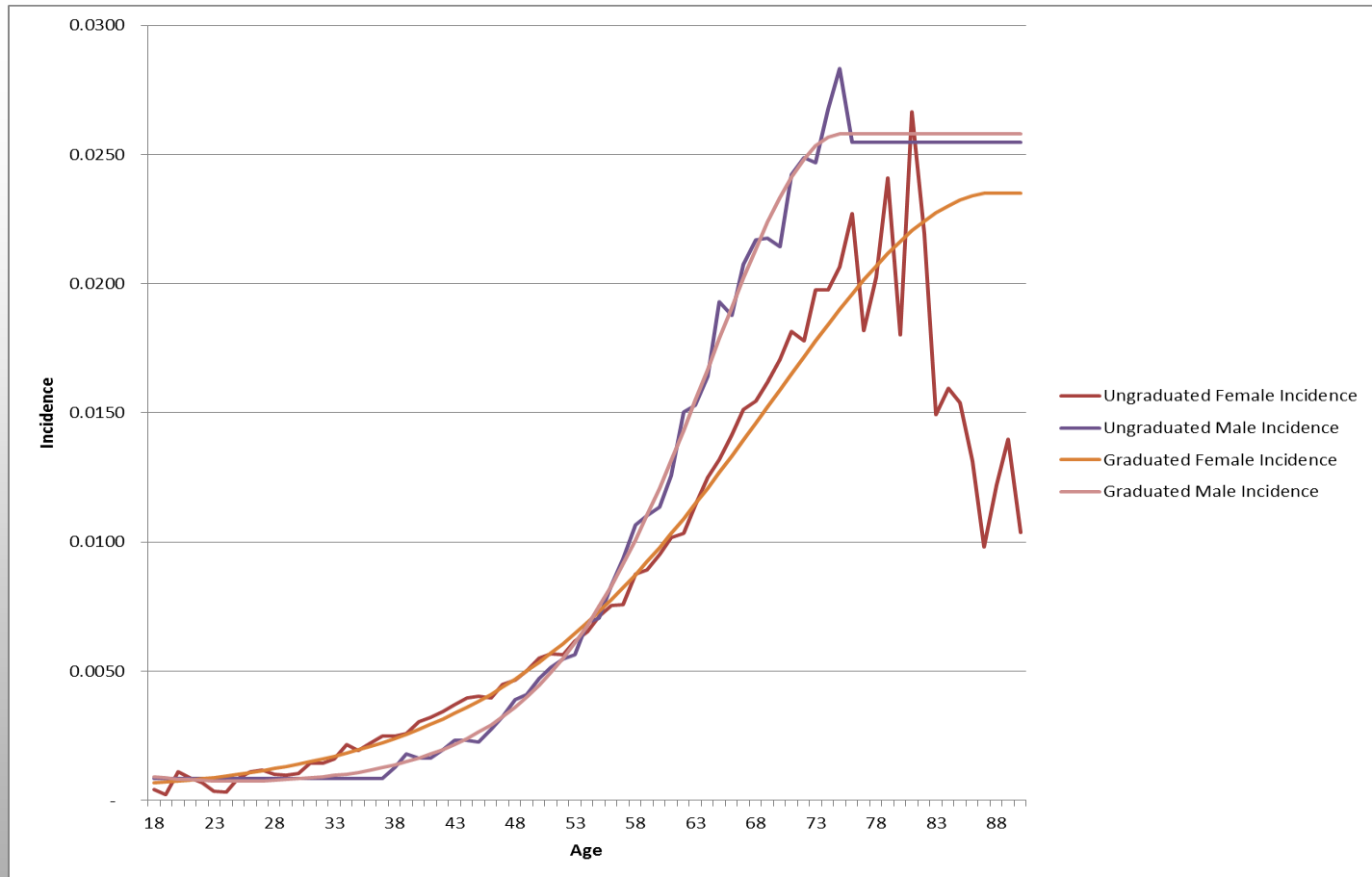
First Occurrence Rates



Data compiled by the CCCTWG



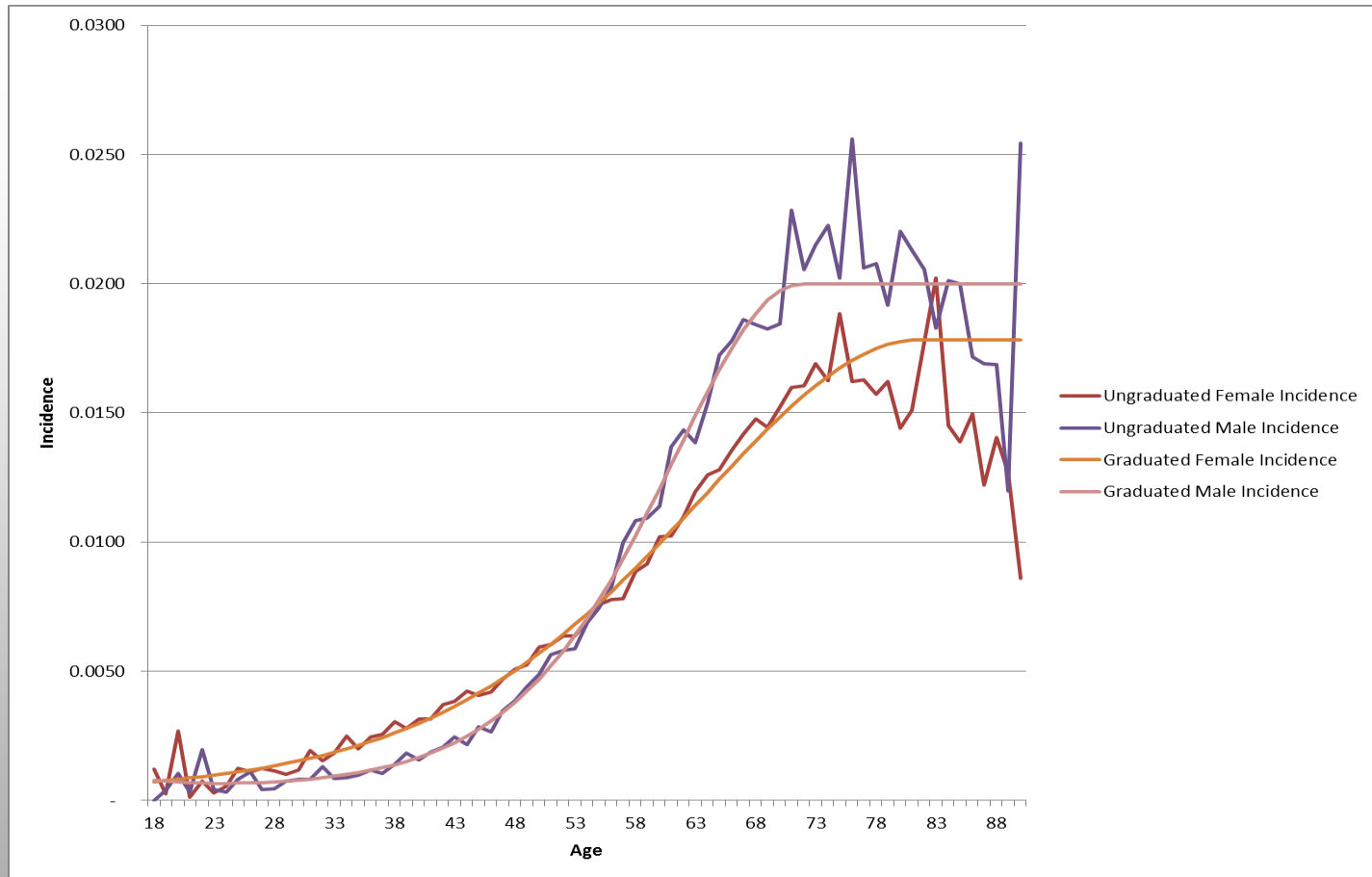
Each Payment Hospital Incidence



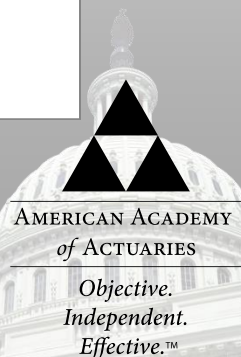
Data compiled by the CCCTWG



All Payment Hospital Incidence



Data compiled by the CCCTWG



Next Steps

- Finalize graduation of tables
- Determine loading methodology
- Draft work group report
- Work with HATF on implementation

