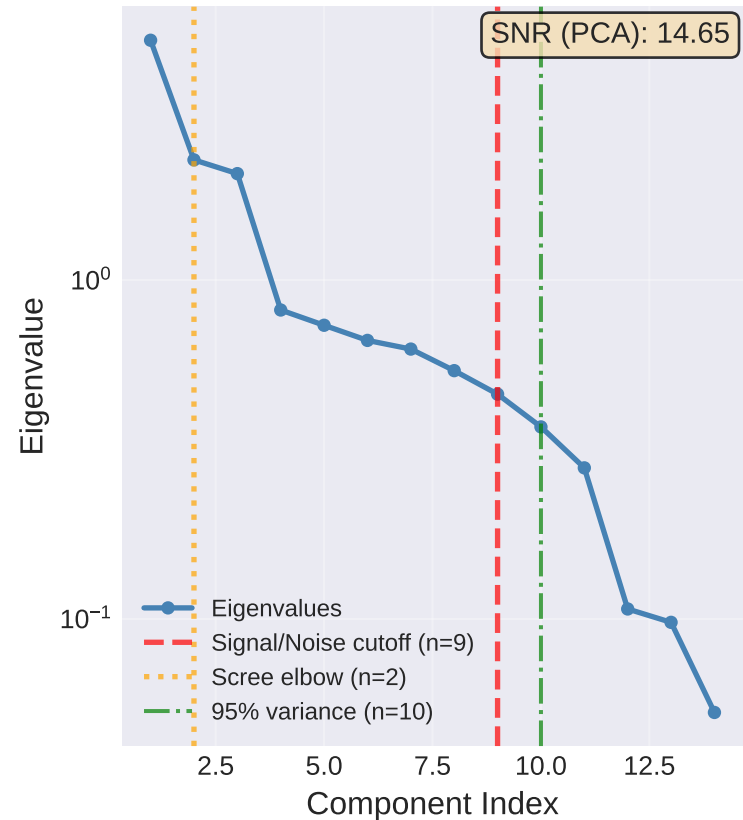
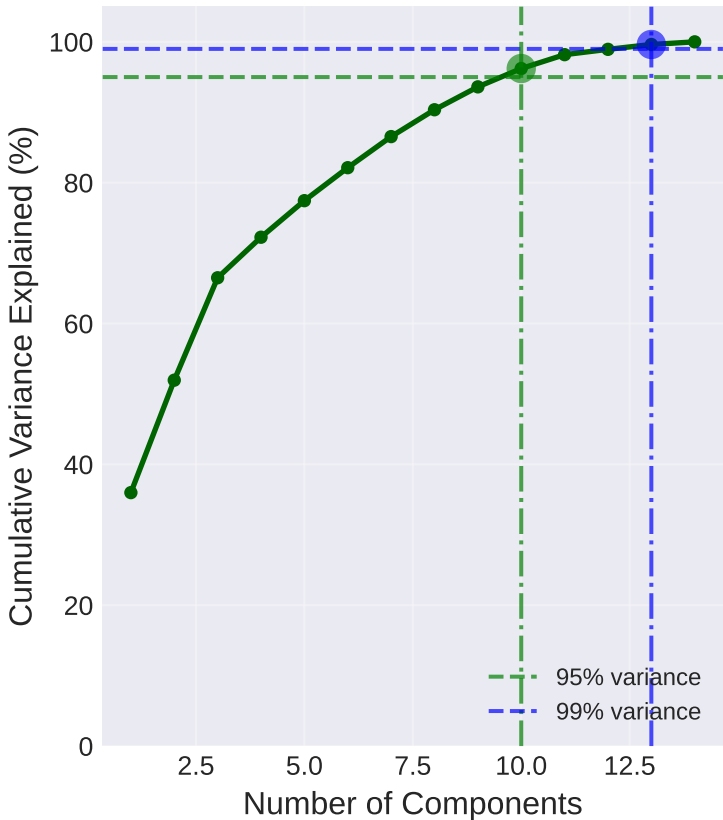


# Signal-to-Noise Ratio Analysis - Clinical Data

### Scree Plot - Clinical Data



### Cumulative Variance - Clinical Data



### SNR Analysis Summary

#### Signal Quality:

High (SNR > 10): Strong signal, low noise

#### SNR Estimates:

PCA-based: 14.65

Variance-based: 0.00

#### Effective Dimensionality:

95% variance: 10 PCs

99% variance: 13 PCs

Scree elbow: 2

#### Recommendations:

K range: 2-8 (signal supports more factors)

#### Prior strength:

WEAK priors ok (SNR > 5): Data-dependent  $\tau_0$  may suffice

#### Convergence:

GOOD: High SNR + well-defined subspace